Computerized Patient Record System (CPRS)

Version 1.0

Setup Guide

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Revision History

Date	Page	Change
10/14/98	138	Added information about ORMTIME
10/15/98	14	Added explanation of global journaling
10/20/98	ii	Added this revision history page
10/22/98	100	Added description for Enter/Edit Actions
11/4/98	110	Added description for new option, List Primary Order
		Menus
11/20/98	193	Added printing from GUI to troubleshooting tips
11/30/98	142	Added more detailed description for Inconsistency
		Checker option (ORE LAB ORDERS CHECK 100=>69)
12/7/98	33	Added new parameters in Miscellaneous Parameters
12/18/98	197	Added troubleshooting info re Vitals corrections,
		Radiology errors, and Patient Confidentiality issues
12/18/98	32, 151	Added information about creating Add Orders menu and
		making it available through the GUI; also how to add
		items to the Write Orders list
1/15/99	157	Added hardware recommendations
3/22/99	32, 109	Corrected info about adding order menus for the GUI
5/25/99	23	Corrected info about electronic signature
5/25/99	17	Corrected info about XQALERT FORWARD
5/26/99	19	Added description of new option: Auto-DC Parameters
6/21/99	36	Added description of Document Templates
7/8/99		
3/7/2000	174	Changed DGPM Movement Event order example.
6/28/2000	4, 5, 61-62,	Changed references to drug-drug interaction to Critical
	64, 66, 67,	Drug Interaction and added information about a new
	78	order check: Significant drug interaction
6/29/2000	24	Added note that release of outpatient meds must be
0/04/0000	50.04	through signature of authorized provider.
8/21/2000	50-61	Updated Flagged Orderable Items material and examples
		to reflect the current state of notifications.

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I. Introduction

Purpose of CPRS Setup Guide

This guide is directed towards staff in IRMS and Clinical Coordinators who will be implementing the CPRS package for their local medical center.

Post-Installation Set-up

This guide contains instructions for setting up or editing parameters, menus, notifications, order checking, etc. It primarily focuses on CPRS core implementation (OE/RR), but it also gives a summary of set-up for the other packages interfacing within CPRS. For complete details on implementation of those packages, see their package documentation.

Troubleshooting & Tricks

This section contains additional information gleaned from test sites and others that may be helpful to you.

Current Users of OE/RR 2.5

Version 1.0 of CPRS (both the GUI and List Manager versions) requires many of the same planning and set-up steps as OE/RR 2.5. Most of the set-up applies to both user interfaces. If you implemented OE/RR 2.5, most of the work you did for 2.5 can be converted with the utilities developed for CPRS. The Pre-installation patch (OR*2.5*49) helps you convert menus, quick orders, and parameters for conversion.

Sites or Services not using OE/RR 2.5

Your site will require more preparation and setup to customize menus, protocols, quick orders, and parameters. Instructions in this manual can help you with this. You can use options on the Order Menu Management menu (distributed with the pre-installation patch, OR*2.5*49, or on the CPRS Configuration Menu when CPRS is installed) to begin creating menus, quick orders, and parameters.

CPRS Web Page

vista.med.va.gov/cprs/

Overview of CPRS

CPRS provides clinicians, managers, support staff, researchers, and others an integrated patient record system. VISTA software for Pharmacy, Lab, Radiology, Allergy Tracking, Consults, Dietetics, Progress Notes, Problem List, Scheduling, MAS (A/D/T), Kernel, FileManager, Vitals, PCMM, PCE, TIU, ASU and Clinical Lexicon packages was written or modified to support and communicate with CPRS. OE/RR was completely re-written. Together, these clinical components of VISTA provide a single interface for physicians to manage patient care and records, as well as an efficient means for others to access and use patient information.

Features:

- Smooth transition from OE/RR When a VAMC installs CPRS, a fully automated process converts existing orders, order dialogs, orderable items, medications, labs, consults, clinical notifications and other components into CPRS. No patient data is lost and little or no manual conversion is required. Installation of CPRS only requires 1-2 hours of system downtime, with little impact on users and patient care. Because of its "user-friendly" design, most VA clinicians can use CPRS with minimal training.
- *OE/RR core module*. All basic CPRS tasks occur within the M environment. Tasks relegated to the GUI workstation include those necessary to communicate with the server and to present and obtain data. Specific components of the core M module for OE/RR include:
 - Order processing and storage. Processing orders in CPRS includes: 1) order dialog presentation, 2) order checking, 3) appropriate holding/processing/status assignment related to user credentials, order signature status, and filling package, 4) HL7 formatting, and 5) event posting for filling package and other interested parties, 6) receiving order status messages from filling package, and 7) updating the appropriate data files. Order storage in CPRS includes a complete, date/time-stamped history of all events related to the order including status changes, ordering, requesting, and signatory personnel, related order checks, and override reason, flagged order data, and various components related to the filling package.
 - *Mechanism for clinical orderable items*. Orderable items are phrased in physician-friendly terms, centrally stored and can be updated at individual VAMCs. Updating is coordinated between OE/RR core and ancillary packages via HL7 messages.
 - *Flagged orders*. An order can be flagged when it requires special attention. A notification regarding the flagged order is sent to appropriate caregivers assigned to the patient.
 - *Electronic signature*. Orderable items can be assigned varying degrees of electronic signature requirements. Unsigned orders trigger a notification to appropriate patient caregivers.

CPRS Overview, cont'd

- *Encounter management*. Orders are linked with specific patient encounters, facilitating point-of-care management and data exchange with encounter-oriented management processes.
- Patient selection. Extensive patient selection capabilities allow physicians to build
 patient lists based on ward, room-bed, clinic appointment, patient's primary
 provider/attending physician, team and individual patient. Once created, providers'
 preferred patient lists are automatically loaded when they access CPRS. For
 example, a provider can set up a patient list based on each day's clinic
 appointments. This list is built automatically each day and displayed to facilitate
 easier patient selection.
- List Manager Interface. Non-GUI, ANSI terminals use the CPRS List Manager interface. Designed with a great deal of clinician usability feedback, this interface displays allergies, lab results, medications, existing orders, consults, and other clinical data in a format conducive to decision making. The order entry process has been streamlined to gather the most pertinent information necessary to fill the order.
- GUI Interface. Clinical workstations in the Windows environment access CPRS through a Delphi-based Graphical User Interface (GUI). Based on years of prototyping, usability studies, and actual clinical use, the CPRS GUI is a full implementation of results reporting and order entry. It communicates with CPRS server processes through the Kernel Broker client-server utility. Data is exchanged via an extensive list of remote procedure calls.
- *HL7 Messaging/Event Processing*. Communication between VISTA packages participating in CPRS is accomplished primarily through event-driven HL7 messaging. This approach allows multiple processes to subscribe to a single CPRS event. The structure and content of the HL7 message provides consistent data for processes subscribing to an event. Additional application programmer interfaces (APIs) exist between OE/RR and ancillary packages to provide data not supported by HL7.
- VAMC Parameters and Defaults. Every VAMC has specialized needs regarding CPRS functionality and processing. To allow variation and modification among VAMCs, CPRS provides a hierarchically structured set of parameters. Each parameter can have a user, team, service/section, patient location, division, system, and package value. The extensive set of parameters exported with CPRS allows VAMC administrators and CPRS users to fine-tune the functionalities and processes specific to their needs.
- Remote Procedure Calls. Generically written data extraction/storage remote procedure calls (RPCs) provide access to VISTA clinical data for CPRS interfaces, VAMC-developed software, and HOST/COTS applications.

CPRS Overview, cont'd

- Consult/Request Tracking. A fully functional consulting package is exported with CPRS. Integrated tightly with CPRS, consults provides consult ordering/requesting, tracking, and resulting. Consulting events such as requesting and resulting trigger notifications to appropriate health care providers, who can then quickly react to the request or result.
- Patient/Team Lists. Patient and Team List functionality in CPRS provides several methods for linking health care providers with patients. Team relationships can be based on ward, room-bed, provider, specialty, and/or clinic. Membership is updated automatically when patients are admitted, discharged, transferred, or assigned to a clinic.
- Expert System. The CPRS Expert System is a modular, rule-oriented, knowledge-based system. It supports CPRS as the basis for real-time order checking (e.g. critical drug interactions, duplicate orders) and background notifications (e.g. critical lab results, expiring medications.) Components include: a Meta-Dictionary for linking discrete medical concepts with data located in files, messages and dialogs; a Rule Editor for creating and editing medical logic modules (MLMs) or rules which relate meta-dictionary concepts in logical expressions; an Inferencing Engine for processing the rules against data; and a Router for distributing results or messages.
- Clinical Notifications. The Notifications component generates patient-specific clinical alerts regarding order entry, consult, radiology, lab, pharmacy, dietetics, and A/D/T information. Alerts are displayed to VISTA users when they sign onto the computer. They can also be delivered to printers, files, and terminals. Many alerts allow recipients to take related follow-up actions. For example, a patient's unsigned order triggers an alert to appropriate health care providers. When a recipient selects the alert, the follow-up action displays the patient's unsigned orders and prompts for electronic signature. Via parameters, VAMCs can disable or enable notifications for users, teams, patient locations, services, divisions, and systems.
- Order Checking. Order Checks are messages interactively displayed to the ordering provider during an ordering session. They occur in real-time and are driven by responses entered by the ordering provider in conjunction with existing patient data. Order Checks are rated according to potential clinical danger level. Order check messages with a low or moderate clinical danger level can be ignored. High clinical danger level order checks require the entry of a reason if they are overridden. This information is passed on to the filling package (e.g. pharmacy) as part of the order. All order check messages include a prompt to cancel or change the order. Via parameters, VAMCs can adjust order check clinical danger levels and disable or enable order checks for users, teams, patient locations, services, divisions, and systems.

Differences between OE/RR 2.5 and CPRS

OE/RR 2.5	CPRS 1.0
1- Screen-like interface	Windows and List Manager interfaces
2- "Backdoor" packages controlled ordering dialogs	CPRS controls all the ordering dialogs
3- Multiple patient selection available	Only single patient selection is available except through the Results Reporting Menu
4- Select an action, then an item	You now select an item then an action
5- Navigation of electronic record took place	The List Manager version allows navigation through the
through a menu structure of options and protocols	electronic record by way of actions that are equivalent to
	the tabs of a chart; GUI version allows navigation by
	clicking on tabs
6- Outpatient Pharmacy ordering not available through OE/RR	Outpatient Pharmacy is now available
7- Consults resulting and tracking not available through OE/RR	Consults fully accessible through CPRS
8- No access to Discharge Summary	Discharge Summary is now available thru CPRS
9- No time-delay ordering capability	Time-delayed orders now available (admission, discharge,
	and transfer)
10- Actions available for orders:	More actions available for orders:
Discontinue Orders	• Copy
Edit Orders	Discontinue
Hold/Unhold Orders	Change
Flag/Unflag Orders	Hold
Renew Orders	Release Hold
Comments for Ward/Clinic	• Flag
Signature on Chart	Unflag
Results Display	• Renew
Long/Short Order Format	Verify
Detailed Order Display	Ward Comments
Print Orders	Sign/On Chart
Print Labels	Results
Requisition Print	• Details
Print Chart Copy	Print List and Print Screen (List Manager actions)
Print Service Copy	Print Labels
Accept Orders	Print Requisitions
	Print Chart Copies
	Print Service Copies
	Print Work Copies
11 Dymligate and an area the substantial shock	Twenty one Orden sheeks now well-bl-
11- Duplicate order was the only order check	Twenty-one Order checks now available ALLERGY-CONTRAST MEDIA INTERAC ALLERGY-DRUG INTERACTION AMINOGLYCOSIDE ORDERED BIOCHEM ABNORMALITY FOR CONTRA CLOZAPINE APPROPRIATENESS CRITICAL DRUG INTERACTION CT & MRI PHYSICAL LIMITATIONS DISPENSE DRUG NOT SELECTED DUPLICATE DRUG CLASS ORDER DUPLICATE DRUG ORDER

OE/RR 2.5	CPRS 1.0
	DUPLICATE ORDER
11- Order checks, cont'd	ERROR MESSAGE
	ESTIMATED CREATININE CLEARANCE
	GLUCOPHAGE-CONTRAST MEDIA
	LAB ORDER FREQ RESTRICTIONS
	MISSING LAB TESTS FOR ANGIOGRA
	ORDER CHECKING NOT AVAILABLE
	POLYPHARMACY
	RECENT BARIUM STUDY
	RECENT ORAL CHOLECYSTOGRAM
	RENAL FUNCTIONS OVER AGE 65
12- Twenty-three Notifications available	Forty Notifications now available
·	LAB RESULTS
	ORDER REQUIRES CHART SIGNATURE
	FLAGGED ORDERS
	ORDER REQUIRES ELEC SIGNATURE
	ABNORMAL LAB RESULTS (ACTION)
	ADMISSION
	UNSCHEDULED VISIT
	DECEASED PATIENT
	IMAGING PATIENT EXAMINED
	IMAGING RESULTS
	CONSULT/REQUEST RESOLUTION
	CRITICAL LAB RESULT (INFO)
	ABNORMAL IMAGING RESULTS IMAGING REOUEST CANCEL/HELD
	NEW SERVICE CONSULT/REQUEST
	SERVICE CONSULT/REQUEST SERVICE ORDER REQ CHART SIGN
	CONSULT/REQUEST CANCEL/HOLD
	NPO DIET MORE THAN 72 HRS
	SITE-FLAGGED RESULTS
	ORDERER-FLAGGED RESULTS
	DISCHARGE
	TRANSFER FROM PSYCHIATRY
	ORDER REQUIRES CO-SIGNATURE
	SITE-FLAGGED ORDER
	LAB ORDER CANCELED
	STAT ORDER
	STAT RESULTS
	DNR EXPIRING
	FREE TEXT
	MEDICATIONS EXPIRING
	UNVERIFIED MEDICATION ORDER
	NEW ORDER
	STAT IMAGING REQUEST
	URGENT IMAGING REQUEST
	IMAGING RESULTS AMENDED
	ORDER CHECK
	FOOD/DRUG INTERACTION ERROR MESSAGE
	CRITICAL LAB RESULTS (ACTION)
	ABNORMAL LAB RESULT (INFO)
13- Processing action for notifications exported by OE/RR	The site can now control the processing action
14- Problem list available only outside OE/RR	Problem List now has a tab in CPRS
15- No patient data overview available	The Cover Sheet provides a clinical overview of the
15 110 patient data overview available	<u> -</u>
	patient.

II. Preparation & Implementation Checklist

Recommended Pre-Installation/Implementation Activities

1.	Facility activities before CPRS
	☐ Establish CPRS Implementation committee composed of service chiefs, clinicians, Clinical Application Coordinators (CACs), upper management, and IRM
	☐ Create Mail Groups for CPRS Super Users, CPRS Admin., and CPRS CACs
	Recruit a Clinical Champion who is well respected by the clinicians and who can dedicate time to CPRS activities. At both West Palm Beach and Puget Sound, the Clinical Champions assumed the "lion's share" of the responsibility for making sure their staff were familiar with CPRS before going live.
	☐ Establish a schedule for CPRS Orientation Kick-Off
	☐ Establish a Training Schedule for CPRS Super Users and End Users
	☐ Establish a Training Schedule for Pharmacy Super Users and End Users
2.	Production activities before CPRS is installed into test
	☐ Implement Pharmacy Data Management and TIU in Production
	☐ Create Mirror Image of Production Account for CPRS Test Environment
3.	Test account activities before CPRS
	☐ Disable Domains that transmit data, e.g., workload transmittals, PDM transmittals
	Review Printer set-ups; make sure that printers in patient care areas and supporting areas such as Lab and Pharmacy are NOT defined for use by applications in the test account
	Review tasked jobs and unschedule tasks that don't need to be run
	☐ Install test patches required for CPRS
	☐ Install OR*2.5*49
	Review protocols that did not convert to Orderable Items
	☐ Exercise all the options introduced by OR*2.5*49

4.

Facility Activities after CPRS is installed into test
Orient your staff to CPRS: Use existing service meetings to discuss the impact of CPRS. For example, one of your clinical champions may want to attend the Medical Service, Surgical Service, and Ambulatory Care committee meetings to orient the clinicians to CPRS and discuss potential problems and solutions related to patient care practices and the software. West Palm Beach used those meetings to discuss CPRS and exercise the software as a group where each individual played a different role. It was really helpful in terms of making sure all aspects of the software were exercised and in establishing CPRS expertise in key clinicians, ADPACs, and CACs.
Emphasize the impact of installing CPRS: It is important that your staff understands the impact that the installation of CPRS into production will have on all the current OERR 2.5 users as well as the Outpatient and Inpatient Pharmacy users.
Review site-specific menus: Make sure that menus created specifically for your site have been reviewed and modified as needed to include CPRS options. Make sure that these changes are documented so that when CPRS is installed into production the changes can be transferred easily.
 Exercise every aspect of CPRS: Make sure that all OE/RR 2.5 users have exercised CPRS functionality that relates to their work processes. Encourage them to exercise the software for at least 4 hours. Assign individuals to become experts in CPRS functional areas:
A. CPRS Configuration:
Establish an understanding of CPRS management.
CPRS Configuration (Clin Coord) Options:
Allocate OE/RR Security Keys
Check for Multiple Keys Edit DC Reasons
GUI Parameters
Miscellaneous Parameters
Notification Mgmt
Order Checking Mgmt
Order Menu Management
Patient List Mgmt
Print Formats
Print/Report Parameters
Release/Cancel Delayed Orders

CPRS Configuration (IRM) Options:

Order Check Expert System Main Menu ...

ORMTIME Main Menu ...

CPRS Clean-up Utilities ...

General Parameter Tools ...

B. Consults

Establish a good understanding of how to set up services as well as all the consult actions that can be taken on a consult. A Consult expert must be able to help users manage consults through CPRS, TIU, and Consults Requests/Tracking.

Receive	Forward	Add Comments	
Cancel	Discontinue	Detailed Display	
Complete	Make Addendum	Print SF 513	

C. Order Checks

Establish a good understanding of what triggers an order check as well as how to manage order checks.

Management Options

Enable/Disable an Order Check

Set Clinical Danger Level for an Order Check

CT Scanner Height Limit

CT Scanner Weight Limit

MRI Scanner Height Limit

MRI Scanner Weight Limit

Orderable Item Duplicate Order Range

Lab Duplicate Order Range

Radiology Duplicate Order Range

Enable or Disable Order Checking System

Enable or Disable Debug Message Logging

Display the Order Checks a User Can Receive

Link Local Terms with Nat'l Expert System Terms

D. **Notifications**:

Establish a good understanding of what triggers a notification, as well as how to manage notifications.

Management Options

- 1 Enable/Disable Notifications
- 2 Erase Notifications
- 3 Set Urgency for Notifications (GUI)
- 4 Set Deletion Parameters for Notifications
- 5 Set Default Recipient(s) for Notifications
- 6 Set Default Recipient Device(s) for Notifications
- 7 Set Provider Recipients for Notifications
- 8 Flag Orderable Item(s) to Send Notifications

Notifications Management Options, cont'd

- 9 Archive(delete) after <x> Days
- 10 Forward Notifications ...
- 11 Set Delays for Unverified Orders ...
- 12 Set Notification Display Sort Method (GUI)
- 13 Send Flagged Orders Bulletin
- 14 Determine Recipients for a Notification
- 15 Display Patient Alerts and Alert Recipients
- 16 Enable or Disable Notification System
- 17 Display the Notifications a User Can Receive
- 18 Set Surrogate Notification Recipient for a User

E. Order Management

Establish a good understanding of all the actions that can be taken on an order for each category of order such as Radiology, Pharmacy, Laboratory, Dietetics, and Consults.

Change	Sign on Chart	Flag	Verify	Details
Renew	Hold	Unflag	Copy	Results Discontinue
Print	Release Hold	Ward Comment	S	

F. Time Delay Orders

Establish a good understanding of how time-delayed orders are placed and activated

G. Transfer Inpatient Medication Orders to Outpatient Medication Orders Establish a good understanding of how orders are transferred from inpatient to outpatient and vice versa.

Establish consistent use of the software: Not everyone in the medical center uses the software the same way. For instance, in one service a consult may be considered
complete after the physician in the receiving service sees the patient and enters a
result. In another service the request may be considered complete if the patient was given a scheduled appointment. Many of these things are process issues, but they need to be tested in each specialty, to make sure every one is using the same rulebook.
Review Clinical Practices and Administrative Process Work Flows: Ensure that patient care practices that are specific to your site are carefully reviewed and tested/implemented via CPRS functionality.

Collect several charts from selected clinical areas

- Replicate the ordering process as noted in those charts in CPRS
- Note timeliness, optimal menus, user configurations, print features, displays etc
- Modify the software configurations to accommodate these user groups/clinical areas
- Save your discoveries for configuring the production account

5.	Facility	activities	two v	weeks	before	CPRS	is	installed	into	production

Alert all CPRS users: At least one-two weeks before your production installation date, remind your CPRS users that CPRS is coming and that they need to be familiar with the software functionality that will impact them. Offer additional training classes. West Palm Beach administered competency tests to all their users to assess their understanding of how the software functions. An example of a competency test is included with this checklist.
Modify your computer sign-on bulletin: Consider adding a statement to your computer sign-on bulletin one week before CPRS is installed, informing users that CPRS is coming. Include the scheduled CPRS installation time as well as the expected downtime. We recommend that you consider installing CPRS around 8:00pm on a Friday and plan for at least 2-3 hours downtime.
Create a schedule of patient care areas where CPRS will be implemented: Create a schedule assigning Super Users and CACs to patient care areas during the first week of CPRS implementation. Staff will need to be scheduled for every shift on every patient care location. You will also need to create an on-call schedule for the most experienced users, e.g., your CACs. Include in that list one or more clinicians who are experts in the software.
Create a protocol for obtaining CPRS help: During the first week of implementation, it is common for users who are not familiar with CPRS to get lost in the software. Create a protocol for obtaining CPRS help and distribute it to all CPRS Users.
<i>Identify patient care areas that may be problematic:</i> Avoid potential disasters in patient care areas that require special considerations by anticipating problems and identifying solutions before CPRS is implemented.

;	Assign installation/implementation responsibilities to staff: Identify which staff will be available for the installation and what their responsibilities will be related to parameter review, printer set-up reviews, exercising the software, and patient care area patrols.
•	Assign a CPRS Command Center Coordinator: Identify the individual at your site who will be the responsible individual at the CPRS Command Center. This individual will need to have a complete understanding of all CPRS functionality and will need to know your staff and the unique problems that could be encountered.
IRM A	ctivities Just Before CPRS is Installed
(Read the CPRS Installation and Setup Guides: Make sure you have thoroughly read the CPRS Installation Guide and the CPRS Setup Guide several days before your installation date. Resolve any questions that arise.
	Back up your system: Make a backup of your system no later than the day before you install CPRS.
	Ensure that you have adequate disk space: Make sure you have at least 300-400 mg free disk space before installing CPRS.
:	Ensure that you have adequate journal space: Make sure you have adequate journal space available to enable journaling after CPRS is installed. The conversion will continue for approximately 24 – 48 hours after CPRS is installed. You will need to monitor your journal space during the time that the conversion is running.
	XQALERT DELETE OLDDelete Old (>14 d) Alerts: Make sure you schedule this option to run daily. If Notifications/Alerts are enabled through CPRS, the ^XTV global will experience a significant growth. Ensuring that this option is run on a daily basis will manage the growth of ^XTV.
	Establish downtime procedures: When CPRS is installed, plan for at least 2-3 hours of downtime. Advise your users and establish downtime procedures.
	Allocate OE/RR keys to new CPRS users: Allocate OE/RR keys to CPRS users who weren't OE/RR 2.5 users. CPRS uses the same keys as OE/RR 2.5.

CPRS Competency Assessment

#	ACTIVITY	Ok	Needs Help
1	Renew Current Orders		
2	Discontinue Current Orders		
3	Review Results of Completed Orders		
	1		
4	Progress Notes		
	• Enter a Telephone Contact progress note from the Notes Tab.		
	• Create a <i>new</i> telephone visit to a telephone clinic; use a		
	diagnosis of your choice and a telephone CPT code of 99371 as the procedure for the visit.		
	 View a list of Progress Notes 		
	 Pick one of the authors on the list of notes and display a list of 		
	all the notes by that author.		
5	Write New Problems (Problem List)		
	Add a problem to the problem list on a patient.		
	• Print the active problems on this patient		
6	Add Allergies		
	Add a new allergy for the patient		
7	Pharmacy Orders		
	Enter/Sign Order for any outpatient medication for		
	hypertension or CHF.		
	Enter/Sign Order for any inpatient medication for		
	hypertension or CHF		
	DC all IV fluid orders		
	• Enter an order for IV fluids d5 ½ NS with 2g Mg, 20 meq		
	KCL 120 cc/hr		
	• Imagine that you are admitting an outpatient to the hospital.		
	Choose one of the outpatient medications and transfer it to		
0	inpatient status.		
8	Lab Orders		
	• Enter/Sign Orders for a CBC & diff, Chem 7 and sputum C&S and gram stain		
	 Using the orders tab, print a list of pending lab orders 		
9	Diet Orders		
	Enter an NPO Diet order		
	Enter a "Regular" Diet order		
10	Consults		
	Request a Consult		
	Receive a Consult		
	Forward a Consult		
	Complete a Consult		
	Result Consults in Consult Tab of CPRS, in TIU, and in the		
	Consult package		
	Define a Team for a Consult Service		
11	Radiology Orders		
	Enter a radiology Order		
	Print the last radiology result		

#	ACTIVITY	Ok	Needs Help
12	Nursing Orders		
	Enter an order to turn the patient		
	Display a list of active nursing orders		
13	Reports Tab		
	Review Outpatient RX Profile		
	Review Dietetic Profile		
	Review Lab Reports		
	Review Health Summary Reports		
	Review Vital Reports		
14	Work Through Admission Order Sets		
	Place orders based on an admission order set		
15	Patient Inquiry		
	Get the patient's demographic information and find the		
	patient's phone number.		
16	CWAD		
	Review the patient postings for a patient		
17	Enter Time-Delay Orders		
	Enter a time-delayed order for an immunization and a		
	Pneumovax		
	Enter a time-delayed order for an imaging study.		
18	Change your View of Patient Data by:		
	• Status		
	Date range		
	Service/Section		
	Short Format		
19	Results Reporting Options		
20	Detailed Display: Look at the information included in a detailed		
	display for:		
	a lab order		
	a pharmacy order		
	• a consult.		
21	Verify Orders		
	As a Nurse, Verify an Order		
	As a Ward Clerk, Verify an Order William Control of the Cont		
22	View the Verified Orders through the Orders Tab		
22	Review of List Manager Hidden Actions:		
	• + Next Screen		
	• UP Up a Line		
	AD Add New Orders Provious Sersor		
	Previous ScreenDN Down a Line		
	DV D : V O I		
	RV Review New Orders FS First Screen		
	 Shift View to Right CWAD Display CWAD Info 		
	LS Last Screen		
	Last Screen < Shift View to Left		
	PI Patient Inquiry		
	GO Go to PagePS Print Screen		
	▼ 1.9 FIIII SCIECII	I	

#	ACTIVITY	Ok	Needs Help
22 cont'd	Review of List Manager Hidden Actions:		, i
	SL Search List		
	RD Redisplay Screen		
	PT Print List		
	• EX Exit		
	ADPL Auto Display On/Off		
23	List Patient by:		
	Clinic		
	Primary Provider		
	Specialty		
	Ward		
	Team/Personal		
	Sort Order		
24	Select New Patient		
25	Flag/Unflag Orders		
26	Patient List: Through Personal Preferences, create:		
	Clinic Patient List		
	Provider Patient List		
27	Notifications: Through Personal Preferences,		
	Look at the Notifications you can receive		
	Enable the notifications you want to receive		
28	Order Checks		
	Look at the Order Checks you can receive		
	Enable the Order Checks you want to receive		
29	Review Patient Selection Preferences		
	Set My Preferred Clinic Start Date		
	Set My Preferred Clinic Stop Date Set My Preferred Clinic Stop Date Output Description:		
	Set My Preferred Clinic Sunday		
	Set My Preferred Clinic Monday Set My Preferred Clinic M		
	Set My Preferred Clinic Tuesday On the Profession of Children with the Profession of Chi		
	Set My Preferred Clinic Wednesday Set My Preferred Clinic Theory Set My Preferred Clinic Theory Set My Preferred Clinic Theory Set My Preferred Clinic Wednesday Set My Preferred Clinic Theory Set My Preferred Clinic Wednesday Set My Preferred Clinic		
	Set My Preferred Clinic Thursday Set My Preferred Clinic First		
	Set My Preferred Clinic Friday Set My Preferred Clinic Setundary		
	Set My Preferred Clinic Saturday Set My Preferred Clinic Saturday		
	Set My Preferred Sort Order for Patient List Set My Preferred Sort Order for Patient List		
	Set My Preferred List Source Set My Preferred List Source		
	Set My Preferred Primary Provider Output Description:		
	Set My Preferred Treating Specialty		
	Set My Preferred Team List		
	Set My Preferred Ward		

III. CPRS Setup Instructions

This section contains instructions and information about setting up CPRS. It is organized according to the sequence of options on the CPRS Manager [ORMGR] Menu.

- A. OE/RR Clean-up
- B. CPRS Configuration (Clinical Coordinator)
 - 1. Electronic signature set-up/assigning security keys
 - 2. GUI setup
 - 3. Miscellaneous Parameters
 - 4. Notifications/alerts
 - 5. Order Checking
 - 6. Menu management
 - Order Menu Management
 - Menus and menu assignment
 - 7. Patient and team lists
 - 8. Printing set-up
 - Chart copies, labels, requisitions, and other copies
 - Print Formats
- C. CPRS Configuration (IRM)
 - 1. Order Check Expert System
 - 2. Purge and Task jobs (ORMTIME Menu)
 - 3. CPRS Clean-up Utilities ...
- D. Other CPRS Configuration
 - 1. List Manager Terminal Settings
 - 2. Nature of Order File

A. OE/RR-CPRS Clean-up

We recommend cleaning up and re-setting various files, menus, and parameters before beginning to use CPRS.

1. CPRS Clean-up Utilities Menu

The Lab Order Checks options on this menu are used to check and clean up some files as you move from OE/RR 2.5 to CPRS.

2. Alerts

Clean up old alerts, either through the option Erase Notifications [ORB3 ERASE NOTIFICATIONS] or by running the Kernel utility XQALERT DELETE OLD.

Erase Notifications lets you do one of the following:

- 1. Erase all notifications for a User
- 2. Erase all notifications for a Patient
- 3. Erase all instances of a notification (regardless of patient).

The XQALERT DELETE OLD option can be queued to run regularly. You can set the number of days an alert is held with the option *Archive*(*delete*) *after* <*x*> *Days* [*ORB3 ARCHIVE PERIOD*] on the Notification Mgmt Menu. You can also designate that alerts be forwarded to a surrogate or supervisor after a certain number of days.

Because this option cleans up old alerts (the archives are still kept), it should be run daily/nightly.

3. Patient Lists

Review patient and team lists set up at your hospital to determine if they are all being used, or if some could be combined.

4. Lab pending orders

Go through lab orders, especially those with statuses of pending, to see if these are still active orders. Lab doesn't purge old orders as many packages do. At test sites, many inactive lab orders were shown as pending, which caused problems. Clean up your records by discontinuing lab orders you don't need.

5. Ward and clinic names

You may want to rename wards and clinics if you have defined a lot of wards and clinics, especially if many begin with the same standard identifiers.

Examples:

```
ATC/AL Dual Dx Gr
ATC/AL Dual Dx Indiv
ATC/AL Dual Dx Int Outpt Gp
```

It's hard to do look-ups on this kind of naming system.

6. Consults

If you had consults categorized as Progress Notes before the Consult/ Request Tracking link to TIU, you may want to delete these if you create new Document Classes and Titles for Consults.

B. CPRS Configuration (Clinical Coordinator)

The options and functionality described in this section are in alphabetical order, as listed on the Clinical Coordinator's CPRS Configuration menu.

CPRS Configuration (Clin Coord) Menu

```
Auto-DC Parameters
       Allocate OE/RR Security Keys
AL
KK
       Check for Multiple Keys
DC
       Edit DC Reasons
GP
       GUI Parameters ...
ΜI
       Miscellaneous Parameters
NO
       Notification Mgmt Menu ...
OC
       Order Checking Mgmt Menu ...
MM
       Order Menu Management ...
LI
       Patient List Mgmt Menu ...
FΡ
       Print Formats
PR
       Print/Report Parameters ...
RE
       Release/Cancel Delayed Orders
```

1. Auto-DC Parameters

This option is for editing hospital-wide parameters that control how CPRS automatically discontinues orders on patient movements.

Example:

```
Select CPRS Configuration (Clin Coord) Option: au Auto-DC Parameters
Auto-DC Parameters for System: OEX.ISC-SLC.VA.GOV
_____
DC Generic Orders on Admission
                                              NO
DC Generic Orders on Ward Transfer
                                              NO
DC on Specialty Change $\operatorname{\textsc{ORDER}}$ ENTRY/RESULTS REPORTING YES
                          INPATIENT MEDICATIONS YES
______
DC GENERIC ORDERS ON ADMISSION: NO// <Enter>
DC GENERIC ORDERS ON WARD TRANSFER: NO// <Enter>
For DC on Specialty Change -
Select PACKAGE: lab
       LAB HL7 OERR
                           LR70
    1
    2 LAB MESSAGING LA7
3 LAB ORDER ENTRY LRX
    4 LAB PRE-RELEASE OERR_V3
5 LAB SERVICE LR
                                      LR02
Press <RETURN> to see more, '^' to exit this list, OR CHOOSE 1-5: 5 LAB SERVICE LR
Are you adding LAB SERVICE as a new PACKAGE? Yes// <Enter> YES
PACKAGE: LAB SERVICE//<Enter> LAB SERVICE LR LAB SERVICE
Value: y YES
For DC on Specialty Change -
Select PACKAGE: <Enter>
```

2. Key Assignment and Electronic Signature Set-up

Allocate CPRS Security Keys

Do not assign more than one of these keys per user.

ORES

- Assigned to users authorized to write and sign orders.
- Typically assigned to licensed physician.
- Allows holders to electronically sign orders.

ORELSE

- Assigned to users authorized to release physician's orders.
- Typically assigned to RN's.

OREMAS

- Assigned to users authorized to release patient orders as signed on chart.
- Typically assigned to Ward Clerks.

Allocate CPRS Security Keys Example

```
Select CPRS Configuration (Clin Coord) Option: AL Allocate OE/RR Security Keys
KEY: ORES
This key is given to users that are authorized to write orders in
the chart. Users with this key can verify with their electronic
signature patient orders.
This key is typically given to licensed Physicians.
Orders entered by users with this key can be released to the ancillary
service for immediate action.
DO NOT give users both the ORES key and the ORELSE key.
Edit Holders? Yes// <Enter>
                          (Yes)
Select HOLDER: WELBY, MARCUS
             Added.
Select HOLDER: <Enter>
______
KEY: ORELSE
This key is given to users that are authorized to release doctors
orders to an ancillary service for action.
This key is typically given to Nurses.
Users with this key are allowed to put verbal orders in the system
and release them to the service for action.
DO NOT give users both the ORES key and the ORELSE key.
Edit Holders? Yes// <Enter> (Yes)
Select HOLDER: NURSE, BONNIE
                                BC
              Added.
Select HOLDER: <Enter>
______
KEY: OREMAS
This is the key given to MAS Ward Clerks. It allows the user to
specify patient orders as 'signed on chart' when entered, which
releases the orders to the service for action. Users with this
key are not allowed to put verbal orders in the system.
Edit Holders? Yes// Y (Yes)
Select HOLDER: WINTERTON, STEVEN B.
             Added.
Select HOLDER: <Enter>
```

Check for Multiple Keys

This option identifies users who have more than one OR key assigned. It also displays which keys they have.

Users with more than one key can encounter problems when adding orders.

Use the *Allocate CPRS Security Keys* option to delete and re-assign keys for the users listed.

```
Select CPRS Configuration (Clin Coord) Option: KK Check for Multiple Keys
This utility identifies users that have more than one OR key assigned.
Users with more than one key can encounter problems when adding orders.
Any users listed will need to have their Keys edited and correctly assigned.
Ok to continue? Yes//<Enter>
                               (Yes)
CLERK, BONNIE (1088) has more than 1 OR key:
                                                            ORES ORELSE OREMAS
WINTERTON, STEVEN B. (1117) has more than 1 OR key:
                                                            ORES OREMAS
MCDANIEL, DWIGHT (1119) has more than 1 OR key:
                                                            ORES ORELSE OREMAS
CEBELINSKI, GREG (1306) has more than 1 OR key:
                                                            ORES ORELSE OREMAS
ACKERMAN, SHIRLEY (1307) has more than 1 OR key:
                                                            ORELSE OREMAS
BROWN, STANLEY A. (1314) has more than 1 OR key:
                                                            ORES ORELSE OREMAS
CPRS, COORDINATOR (1340) has more than 1 OR key:
                                                            ORES ORELSE OREMAS
```

Electronic Signature

An electronic signature is the private code that an authorized user types into the system after performing certain actions. For CPRS, it's used by clinicians entering orders. This signature has the same validity as the written signature on the chart.

Implementing electronic signature for CPRS is a four-step process:

- 1. Define the clinician as a provider in the NEW PERSON file.
- 2. Assign the clinician the Provider key (while in the NEW PERSON file).
- 2. Assign the ORES key to clinicians who have signature authority.
- 3. Assign electronic signature codes (this can be done by the coordinator, at the same time as defining the clinician as a provider in the NEW PERSON file, or by the clinician, using *Electronic Signature Code Edit* on the User's Toolbox menu. See instructions on following pages).

Users may have the ORES key but not have an electronic signature code, and will, therefore, not be allowed to electronically sign orders on the system.

NOTE: Until ORES key holders have an electronic signature code, the system assumes that orders entered have been entered and manually signed "on chart"; orders are automatically released to the ancillary service for action.

Once ORES key holders have an electronic signature code, they will be prompted to enter the electronic signature after accepting the orders. If the electronic signature code is entered correctly, the orders are released to the ancillary services for action. If the electronic signature code is not entered, or is entered incorrectly, the orders are *not* released to the ancillary services for action, but are held in an unreleased/unsigned status. Key holders are given three chances to correctly enter their signature codes.

GUI Review and Sign works as follows, according to signature status:

User has provider key only (med student): If there are notes the user can sign, the ES panel appears in Review/Sign Changes; otherwise it is hidden. Orders appear on the list with the checkbox grayed. If the ES is entered for documents, it is NOT applied to the orders.

User has OREMAS key: If users (clerks) have entered notes for which they are the author AND orders on behalf of a provider, TWO review screens will appear—one prompting for ES for the things the clerk can sign (a note), and one to allow the clerk to process the orders (mark signed on chart).

User has ORELSE key: Works the same as for clerks, but the user can also release the orders.

User has ORES key: Sees the review screen with the ES prompting, both for notes and orders.

Note: Outpatient med orders cannot be released to pharmacy unless an authorized provider signs the order. Verbal, telephoned, and written orders are no longer accepted. You can read the rule for this on the intranet: http://vaww.va.gov/publ/direc/health/manual/020704.htm.

Electronic Signature Edit option

Key holders may enter or edit their electronic signature codes through the option, "Electronic Signature Edit," on the User's Toolbox menu. To change an existing code, the user must type in the current code and then enter the new one.

Set-up of Electronic Signature

If key holders forget their electronic signature codes, they must contact their IRM Service so that the old code can be deleted. Once this has been done, the user will be allowed to enter a new code without having to know the old code. IRM staff can delete the electronic signature code by editing the field, ELECTRONIC SIGNATURE CODE (20.4) in the NEW PERSON file (200), or by using the option, "Clear Electronic Signature Code [XUSESIG CLEAR]."

Allocate CPRS Security Keys

- 1. Assign the appropriate keys to the appropriate users, using the CPRS Configuration (Clin Coord) option, *Allocate CPRS Security Keys*.
- 2. Users add their signature codes through the option, *Electronic Signature Code Edit*, on the User's Toolbox menu. Users with the ORES key will not see the electronic signature prompts until they do this.

If the ORES key holder hits Enter at the electronic signature prompt (in the List Manager version of CPRS), this dialogue appears:

```
You did not enter a signature code!
...orders requiring signature will be marked as 'SIGNED ON CHART'.
```

Once ORES keyholders add their signature codes, they will see:

```
To electronically sign these orders...
Enter Signature Code: (xxxxxxx) <hidden>
SIGNED
```

4. Users with the ORELSE and OREMAS keys will see the following prompts after entering orders:

```
Select Action: Accept Orders// <Enter> Accept Orders

...insufficient signature authority
NOT SIGNED

Do you want to mark these orders as 'Signed on Chart'? YES// <Enter> (YES)
```

4 a. If ORELSE key holders answer no, the computer dialogue will be:

```
...insufficient signature authority

NOT SIGNED

Do you want to mark these orders as 'Signed on Chart'? YES// n (NO)

These orders have not been signed by an authorized physician

Do you still want to release these orders to the service? YES//<Enter>

NATURE OF ORDER: VERBAL// <Enter>
```

4 b. If OREMAS key holders answer no, the dialogue will be :

```
...insufficient signature authority
NOT SIGNED

Do you want to mark these orders as 'Signed on Chart'? YES// n (NO)

UNRELEASED ORDERS:
$ PROTHROMBIN TIME BLOOD PLASMA LB #1971 WC
```

Electronic Signature Code Edit [XUSESIG]

This option on the User's Toolbox menu (on any **V**IST**A** menu) lets you enter or change your initials, signature block information, or office phone number. You can also enter a new Electronic Signature Code or change an existing code. If you forget your existing signature code, you will have to have it deleted by your clinical coordinator or site manager before you can enter a new one.

Select Option: tb User's Toolbox Select User's Toolbox Option: electronic Signature code Edit This option is designed to permit you to enter or change your Initials, Signature Block Information Office Phone number , and Voice and Digital Pagers numbers. In addition, you are permitted to enter a new Electronic Signature Code or to change an existing code. INITIALS: JG// <Enter> SIGNATURE BLOCK PRINTED NAME: ? Enter your name as you want it to appear on official documents SIGNATURE BLOCK PRINTED NAME: JOANN GREEN// ??

on the Chart Copy

The name entered must contain the surname of the user.

This field can then contain the name of the user as they wish it to be displayed with the notation that they signed the document electronically.

For example: John R. Doe, M.D. Fred A. Sample, RN.

SIGNATURE BLOCK TITLE: JOANN GREEN// ??

This field should contain the title of the person who is electronically signing a document. Examples of titles are Chief of Surgery, Dietician, Clinical Pharmacist, etc. This title will print next to the name of the person who signs the document. person's name will be taken from the SIGNATURE BLOCK PRINTED NAME field.

SIGNATURE BLOCK TITLE: Chief of Surgery

OFFICE PHONE: 588-5844

ANALOG PAGER: DIGITAL PAGER:

Enter your Current Signature Code: <hidden JG1234> SIGNATURE VERIFIED

The signature code must be 6 to 20 characters in length with no control or lowercase characters.

This is the title that will appear

> ENTER NEW SIGNATURE CODE: < hidden JGREED> SIGNATURE VERIFIED

Your typing will not show.

RE-ENTER SIGNATURE CODE FOR VERIFICATION: <hidden> JGREED

3. Edit DC Reasons

This option allows you to enter or edit the possible reasons (as listed in the Order Reason file) for discontinuing orders. The exported reasons are:

Duplicate Orders
Discharge
Transfer
Treating Specialty Change
Admit
Requesting Physician Cancelled
Obsolete Order

Example

```
Select CPRS Configuration (Clin Coord) Option: Edit DC Reasons
Select DC REASON: Entered in error
 Are you adding 'Entered in error' as a new ORDER REASON? No// y (Yes)
  ORDER REASON NUMBER: 16// <Enter>
NAME: Entered in error// <Enter>
SYNONYM: ER
INACTIVE: <Enter>
NATURE OF ACTIVITY: ?
Answer with NATURE OF ORDER NUMBER, or NAME, or CODE
Do you want the entire 11-Entry NATURE OF ORDER List? y (Yes)
Choose from:
                  WRITTEN
   2
                  VERBAL
   3
                  TELEPHONED
                   SERVICE CORRECTION
  5
                  POLICY
                               Ι
   6
                  DUPLICATE
                  REJECTED
                  PHYSICIAN ENTERED
   8
                  AUTO
  10
                  CHANGED
                  MAINTENANCE
  11
NATURE OF ACTIVITY: 4
```

4. GUI Setup

Required Files:

CPRSChart.exe CPRS executable CPRS.hlp CPRS help file

HOSTS should reside on the client already

Steps for setting up the CPRS GUI

- **a.** Assign OR CPRS GUICHART as a secondary menu item to anyone who will be using the GUI.
- **b.** Make sure servers are listed in the HOSTS file. If necessary, modify the HOSTS file of each client (PC) to set the appropriate mappings between names and IP addresses. The HOSTS file is located as follows:

Version of Windows OS	File (Location and Name)
Windows 95	C:\WINDOWS\HOSTS
Windows NT 3.51	C:\WINDOWS\SYSTEM32\DRIVERS\ETC\HOSTS
Windows NT 4.0	C:\WINNT\SYSTEM32\DRIVERS\ETC\HOSTS

Example of a Windows 95 HOSTS file

```
# Copyright (c) 1994 Microsoft Corp.
# This is a sample HOSTS file used by Microsoft TCP/IP for Chicago
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
# For example:
#
#
       102.54.94.97
                       rhino.acme.com
                                                # source server
        38.25.63.10
                                                # x client host
                        x.acme.com
```

- 1) Move the cursor to the end of the last line displayed in the file.
- 2) Press the Enter Key to create a new line.
- 3) On the new line, enter the desired IP address beginning in the first column, as described in the example above. As recommended, add an appropriate IP address for the DHCPSERVER Host name as the next entry below 127.0.0.1.

3) After typing the IP address, type at least one space, and enter the Host name that corresponds to that IP address. As recommended, type in DHCPSERVER as the next entry below "loopback,"

For example, the entry for a server at your site with an IP address of 192.1.1.1 would look like this:

```
127.0.0.1 localhost # loopback <---existing entry
192.1.1.1 DHCPSERVER # cprs <---added entry
```

- 4) Repeat steps a d until you have entered all of the IP addresses and corresponding Host names you wish to enter.
- 5) When your entries are complete, use Notepad's **File** | **Save** command to save the HOSTS file.
- **NOTE:** *Do not save the HOSTS file with an extension; delete the .sam!*
 - 6) Close the HOSTS file.
- NOTE: The HOSTS file location on NT 4.0 Client is different from on WIN95. The CPRS executable attempts—using RPC Broker—to log in to the default DHCP server when CPRS executes. RPC Broker cannot find the HOSTS file, so it uses the default.

The best workaround is to create a shortcut to the CPRS executable on your PC:

- right click on the executable icon
- select "Properties"
- add s="your server name" p="your listener port" after the .exe command

For more information, see the RPC Broker V.1.1 Systems Manual.

- **c**. Copy the file CPRSChart1.0.exe and CPRS.hlp to the workstations or put the files in a shared directory on the network. Rename CPRSChart1.0.exe to CPRSChart.
- **d. (optional)** If desired, you can either create a shortcut or an icon for CPRSChart or add it to the Start menu.

GUI Parameters

Option Text	Option Name	Description
GUI Cover Sheet	ORQ SEARCH	This option allows IRM staff to modify the default number
Display	RANGE MGR MENU	of days to display on the cover sheet.
Parameters		
GUI Health	ORW HEALTH	This option lets you set up a list of health summary types
Summary Types	SUMMARY TYPES	available in the CPRS GUI (on the Reports tab). Don't add
		health summaries that do additional prompting (such as for
		date ranges & occurrence limits), since the GUI can't
		support this type of prompting.
GUI Tool Menu	ORW TOOL MENU	This option lets you add items that will appear on your
Items	ITEMS	Tools menu in the CPRS GUI. Items that appear on the
		tools menu should be Windows executable files.

GUI Cover Sheet Display Parameters Menu

Options on this menu are used to set the default date or item ranges of items displayed on the CPRS GUI Cover Sheet.

Option Text	Option Name	Description
GUI Cover Sheet	ORQ SEARCH	This option allows you to modify a <i>division's</i> default
Division Display	RANGE	number of days to display on the cover sheet for Inpatient
Parameters		Lab Orders and Results, Outpatient Lab Orders and
		Results, Radiology Exams, Consult/Requests, Appt Start
		Dates, Appt Stop Dates, Visit Start Dates, Visit Stop
		Dates, and Clinical Reminders.
GUI Cover Sheet	ORQ SEARCH	This option allows you to modify a <i>location's</i> default
Location Display	RANGE	number of days to display on the cover sheet for Inpatient
Parameters		Lab Orders and Results, Outpatient Lab Orders and
		Results, Radiology Exams, Consult/Requests, Appt Start
		Dates, Appt Stop Dates, Visit Start Dates, Visit Stop
		Dates, and Clinical Reminders.
GUI Cover Sheet	ORQ SEARCH	This option allows you to modify a service's default
Service Display	RANGE SERVICE	number of days to display on the cover sheet for Inpatient
Parameters	PARAM	Lab Orders and Results, Outpatient Lab Orders and
		Results, Radiology Exams, Consult/Requests, Appt Start
		Dates, Appt Stop Dates, Visit Start Dates, Visit Stop
		Dates, and Clinical Reminders.
GUI Cover Sheet	ORQ SEARCH	This option allows you to modify the <i>system's</i> default
System Display	RANGE SYSTEM	number of days to display on the cover sheet for Inpatient
Parameters	PARAM	Lab Orders and Results, Outpatient Lab Orders and
		Results, Radiology Exams, Consult/Requests, Appt Start
		Dates, Appt Stop Dates, Visit Start Dates, Visit Stop
		Dates, and Clinical Reminders.
GUI Cover Sheet	ORQ SEARCH	This option allows a <i>user</i> to modify the default number of
User Display	RANGE USER	days to display on the cover sheet for Inpatient Lab Orders
Parameters	PARAM	and Results, Outpatient Lab Orders and Results,
		Radiology Exams, Consult/Requests, Appt Start Dates,
		Appt Stop Dates, Visit Start Dates, Visit Stop Dates, and
		Clinical Reminders.

GUI Cover Sheet User Display Parameters Example

This option allows you to modify the *user's* default number of days to display on the cover sheet for Inpatient Lab Orders and Results, Outpatient Lab Orders and Results, Appt Start and Stop Dates, Visit Start and Stop Dates, and Clinical Reminders.

All of the options on this menu are very similar to this example.

```
Select GUI Parameters Option: US GUI Cover Sheet Display Parameters
         GUI Cover Sheet System Display Parameters
   DI
         GUI Cover Sheet Division Display Parameters
         GUI Cover Sheet Service Display Parameters
   SE
   LO
         GUI Cover Sheet Location Display Parameters
   US
         GUI Cover Sheet User Display Parameters
Select GUI Cover Sheet Display Parameters Option: US GUI Cover Sheet User
Display Parameters
Select NEW PERSON NAME: GREEN, JOANN
GUI Cover Sheet - User for User: GREEN, JOANN
 ______
Lab Order/Result Inpatient Date Range
                                                 60
Lab Order/Result Outpatient Date Range
Appt Search Start Date
Appt Search Stop Date
Visit Search Start Date
Visit Search Stop Date
Clincal Reminders for Search
Inpatient Lab Number of Display Days: 60//
Outpatient Lab Number of Display Days: 120
Appt Search Start Date: T// T-30
Appt Search Stop Date: T+90// T+60
Visit Search Start Date: T-365// T-30
Visit Search Stop Date: T// T+60
For Clincal Reminders for Search -
Select Number: 10
Are you adding 10 as a new Number? Yes//
Number: 10//Enter>
                       10
Value: ?
Answer with PCE REMINDER/MAINTENANCE ITEM NAME, or REMINDER TYPE, or
    PRINT NAME
Do you want the entire 34-Entry PCE REMINDER/MAINTENANCE ITEM List? Y (Yes)
Choose from:
   VA-*BREAST CANCER SCREEN
   VA-*CERVICAL CANCER SCREEN
   VA-*CHOLESTEROL SCREEN (F)
   VA-*CHOLESTEROL SCREEN (M)
   VA-*COLORECTAL CANCER SCREEN
  VA-*COLORECTAL CANCER SCREEN (
   VA-*FITNESS AND EXERCISE SCREE
   VA-*HYPERTENSION SCREEN
   VA-*INFLUENZA IMMUNIZATION
   VA-*PNEUMOCOCCAL VACCINE
   VA-*PROBLEM DRINKING SCREEN
   VA-*SEAT BELT AND ACCIDENT SCR
```

GUI Cover Sheet User Display Parameters, cont'd

```
VA-*TETANUS DIPTHERIA IMMUNIZA
  VA-*TOBACCO USE SCREEN
  VA-*WEIGHT AND NUTRITION SCREE
  VA-ADVANCED DIRECTIVES EDUCATI
  VA-ALCOHOL ABUSE EDUCATION
  VA-BLOOD PRESSURE CHECK
  VA-BREAST EXAM
  VA-BREAST SELF EXAM EDUCATION
  VA-DIGITAL RECTAL (PROSTATE) E
  VA-EXERCISE EDUCATION
  VA-FECAL OCCULT BLOOD TEST
  VA-FLEXISIGMOIDOSCOPY
  VA-INFLUENZA VACCINE
  VA-MAMMOGRAM
  VA-NUTRITION/OBESITY EDUCATION
  VA-PAP SMEAR
  VA-PNEUMOVAX
  VA-PPD
  VA-PSA
  VA-SEAT BELT EDUCATION
  VA-TOBACCO EDUCATION
  VA-WEIGHT
Value: INFLUENZA ??
Value: VA-INFLUENZA VACCINE
For Clincal Reminders for Search -
Select Number: <Enter>
```

GUI Health Summary Types

Use this option to enter Health Summary types that may be displayed on the Reports screen. Include only health summaries that do no additional prompting, such as for time and occurrence limits; these must be already defined. Since the GUI can't drop into a character-based scrolling dialog, ad hoc health summaries are not allowed.

```
Select GUI Parameters Option: HS GUI Health Summary Types

--- Setting Allowable Health Summary Types for System: OEX.ISC-SLC.VA.GOV

Sequence: ?

Enter the sequence in which this health summary should appear in the list.

Select Sequence: 1

Sequence: 1// 1

Health Summary: GMTS HS EYE CLINIC

Select Sequence: <Enter>

CS GUI Cover Sheet Display Parameters ...

HS GUI Health Summary Types

TM GUI Tool Menu Items

Select GUI Parameters Option: <Enter>
```

GUI Tool Menu Items

This option lets you add items that will appear on your Tools menu in the CPRS GUI. Items that appear on the tools menu should be Windows executable files. Enter them in this format: "Display Text=Executable."

For example, Vista Terminal Emulator=KEA.EXE VISTA.

```
Select GUI Parameters Option: tm GUI Tool Menu Items
CPRS GUI Tools Menu may be set for the following:
    1
        User
                      USR
                             [choose from NEW PERSON]
                    LOC
    2
        Location
                             [choose from HOSPITAL LOCATION]
        Division
                      DIV
                             [REGION 5]
                             [OEX.ISC-SLC.VA.GOV]
        System
                      SYS
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: GREEN, JOANN
----- Setting CPRS GUI Tools Menu for User: GREEN,JOANN ------
Sequence: ?
Enter the sequence in which this menu item should appear.
Select Sequence: 1
Are you adding 1 as a new Sequence? Yes// YES
Sequence: 2// <Enter>
Name=Command: ??
This parameter may be used to identify which items should appear on the
tools menu which is displayed by the CPRS GUI. Each item should contain
a name that should be displayed on the menu, followed by an equal sign,
followed by the command string used to invoke the executable. This
string may also include parameters that are passed to the executable.
Some example entries are:
    Hospital Policy=C:\WINNT\SYSTEM32\VIEWERS\QUIKVIEW.EXE LOCPLCY.DOC
    VISTA Terminal=C:\PROGRA~1\KEA\KEAVT.EXE VISTA.KTC
An ampersand may be used in the name portion to identify a letter that
should be underlined on the menu for quick keyboard access. For example,
to underscore the letter H in Hospital Policy, enter &Hospital Policy as
the name part.
Name=Command: c:\MSOFFICE\$WINWORD.EXE
Example: Notepad=C:\WINDOWS\NOTEPAD.EXE.
Name=Command:
```

Adding an Add Orders Menu to the GUI

The parameters that control the "Write Orders" list are edited through the General Parameter Tools menu (XPAR MENU TOOLS).

Using General Parameter Tools on the CPRS Configuration menu (IRM)

- 1. Use the *List Values for a Selected Parameter* option to see how the parameter for the write orders list is exported (the package level of the parameter ORWOR WRITE ORDERS LIST).
- 2. Use *Edit Parameter Values*, select ORWOR WRITE ORDERS LIST.
- 3. Select "System" to enter the dialogs and menus that you want to appear in the list at your site.

Using Order Menu Management - *Enter/edit order menus* on the CPRS configuration menu (Clin Coord).

- Create a new menu. Remember, this menu will be what shows up in the list box on the left side
 of the orders tab, so it should be a single column. You can put what you want in this list. The
 idea was that it would contain the most common ordering menus and dialogs to which a user
 needs access.
- 2. After creating the menu, use *Edit Parameter Values* and select ORWDX WRITE ORDERS LIST as the parameter.
- 3. Select "System" and enter the menu you just created as the value. You can override by exception what you set for the system level by setting the parameter for a particular division or user. The ORWDX WRITE ORDERS LIST parameter takes precedence over the ORWOR WRITE ORDERS LIST parameter, if both are present.

You can find what was on the "Write Orders" list to start with by using the parameter tools menu (XPAR MENU TOOLS), selecting List Values for a selected parameter, and entering ORWOR WRITE ORDERS LIST as the parameter. The exported list will be preceded by PKG. If the list has been modified at your site, each item will be preceded by SYS. If a list has been set up for a specific user, it will be preceded by USR.

The "Write Orders" list, as exported, contains the following dialogs:

Sequence	Value	Display Name
30	FHW1	Diet
52	PSJ OR PAT OE	Meds, Inpatient
55	PSO OERR	Meds, Outpatient
58	PSJI OR PAT FLUID OE	IV Fluids
60	LR OTHER LAB TESTS	Lab Tests
70	RA OERR EXAM	Radiology
80	GMRCOR CONSULT	Consult
85	GMRCOR REQUEST	Procedure
90	GMRVOR	Vitals
99	OR GXTEXT WORD PROCESSING ORDER	Text Only Order

The sequence is just an arbitrary number to indicate the order that the dialog should be in the list.

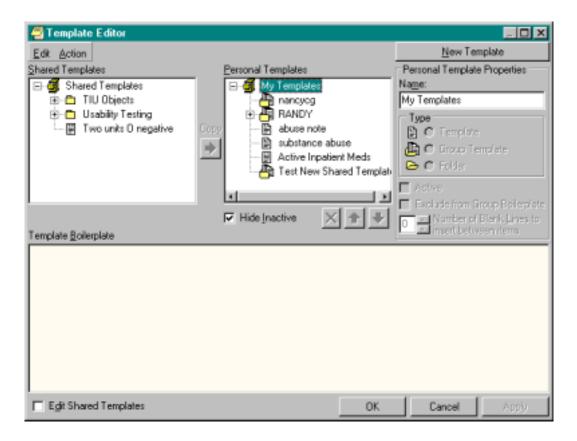
```
Select OPTION NAME: ORMGR
                                   CPRS Manager Menu
                                                          menu
          Clinician Menu ...
         Nurse Menu ...
  MM
         Ward Clerk Menu ...
          CPRS Configuration (Clin Coord) ...
   PE
   IR
         CPRS Configuration (IRM) ...
Select CPRS Manager Menu Option: IR CPRS Configuration (IRM)
          Order Check Expert System Main Menu ...
  TТ
          ORMTIME Main Menu ...
  UT
         CPRS Clean-up Utilities ...
          General Parameter Tools ...
   XX
Select CPRS Configuration (IRM) Option: XX General Parameter Tools
         List Values for a Selected Parameter
  LE
         List Values for a Selected Entity
   LΡ
         List Values for a Selected Package
  T.T
         List Values for a Selected Template
         Edit Parameter Values
  EΡ
         Edit Parameter Values with Template
Select General Parameter Tools Option: EP Edit Parameter Values
                         --- Edit Parameter Values ---
Select PARAMETER DEFINITION NAME: ORWDX WRITE ORDERS LIST
                                                            Menu for Write
Orders List
ORWDX WRITE ORDERS LIST may be set for the following:
                       USR
                              [choose from NEW PERSON]
                              [REGION 5]
     7
        Division
                      DTV
                             [OEX.ISC-SLC.VA.GOV]
        System
                      SYS
Enter selection: 2 User NEW PERSON
Select NEW PERSON NAME: GREEN, JOANN
                                            ja
------ Setting ORWDX WRITE ORDERS LIST for User: GREEN,JOANN -------
Order Dialog: ??
Choose from:
  FHWMENU
   GMRVORMENU
  OR ADD MENU CLINICIAN
  OR GMENU ACTIVITY ORDERS
  OR GMENU ORDER SETS
  OR GMENU OTHER ORDERS
  OR GMENU PATIENT CARE ORDERS
   OR GXMOVE PATIENT MOVEMENT
  ORZ WHATEVER
   ZZCURTIS
   ZZJFR MENU
   ZZJFR TEST MENU
   ZZKCM MENU
   ZZKCM MENU 1
   ZZMARCIA
   ZZMEL MENU
   ZZRV1
Order Dialog: ZZMEL MENU
```

Document Templates

(NOTE: This functionality becomes available with Version 12 of Patch 10.)

Document templates let you quickly add commonly used text and TIU objects when writing or editing progress notes, completing consults, or writing discharge summaries.

The Template Editor, shown below, is used to set up personal, shared, and group templates. These types of templates are described in the following section.



Personal templates. Any user can create his or her own templates. You can copy and paste text into a template, type in new content, add TIU objects, or begin by copying a shared template and then modifying it as needed. Personal template and folder icons have a folded upper right corner.

Shared templates. Only members of the Clinical Coordinator ASU class can *create* shared templates. Shared templates are available to all users. Coordinators can copy and paste text into a template, type in new content, add TIU objects, or begin by copying a personal template and then modifying it as needed. In the tree view, shared template and folder icons do not have a folded corner.

NOTE: When you install CPRS, a copy of all your existing boilerplate titles is placed in the inactive boilerplates folder under shared templates.

Clinical coordinators can arrange the boilerplate titles copied into the shared templates to be used as templates, use them to create new templates, or make them available to users by moving them out of the inactive folder. Users will not see the inactive folder or its contents unless you choose to make the folder active.

(To see the boilerplates folder, go into the templates editor, make sure Edit Shared Templates is checked, uncheck Hide Inactive under shared templates, and click the plus sign beside the shared icon.)

Types of Templates

When you create templates, you can go directly into the template editor, type in text, and add TIU objects, or if you are in a document and type in something you will use repeatedly, you simply select that text, right-click, select Create New Template, and the editor comes up with the selected text in the editing area.

You can create individual templates, group templates, or folders.

Templates contain text and TIU objects that you can place in a document.

Group templates contain text and TIU objects and can also contain other templates. If you place a group template in a document, all text and objects in the group template and all the templates it contains (unless they are excluded from the group template) will be placed in the document. You can also expand the view of the group template and place the individual templates it contains in a document one at a time.

Folders are like folders or directories in a file system. They are used to group and organize templates. You cannot place a folder in a document. It is there to hold templates and help in navigating the template tree view. For example, you might create a folder called "radiology" for templates, group templates, and other folders relating to radiology.

Arranging Templates for Ease of Use

How you arrange your templates depends on your specific needs. However, it may be useful to group similar templates together. You can also use folders to group similar templates, making them easier to find. This organization will be similar to a good directory structure for your workstation. For example, you may want to place all of the pulmonary templates together rather than alphabetizing templates.

By placing those templates together that you will use, you will spend less time moving around the tree to find the template you need.

Using Templates to Create Documents

Once you have created templates, adding them to a document is easy. When you create a new note, a Templates button (also called a "drawer") appears. When you click the button, it opens to show you the templates that are available. Group templates and folders have a plus next to them. Click the plus to expand the tree view and see the templates they contain. Click a minus sign to collapse the tree view, hiding the templates under that item.

When you find the object you want to place in a document, you can drag-and-drop it into the document, double-click it, or right-click and choose Insert Template. The text and objects will appear where the cursor was a few seconds later.

Searching for Templates

You can search for templates by the words in the template name. To search, right-click in the templates in the editor or in the templates "drawer" and choose Find Templates. A text field, Find button, and two find options check boxes appear. Enter the text you want to find and click Find.

Creating Personal Document Templates

To create a personal document template, follow these steps:

1. On the Notes, Consults, or D/C Summ tab, bring up the Template Editor by selecting Options | Create New Template

-or-

To save specific text in a new note as a template, select the text, right-click on it, and select Copy into New Template.

- 2. In the Name field under Personal Template Properties, enter a name for the new template. Remember the template name requirements.
- 3. Click the template type: Template, Group Template, or Folder.
- 4. For Templates and Group Templates, enter the text and TIU objects (if desired) to create the content. you can enter content in these ways:

Copy and paste from other documents

Type in text Insert TIU objects Copy a shared template

- **PNOTE**: After you enter the content, you can right-click in the Template Boilerplate area to select spell check or Check Boilerplate for Errors, which looks for invalid TIU objects.
 - 5. Find where you want to place the template in the tree view.
 - a. Click the plus sign next to an item to see the objects under it.
 - b. Drag-and-drop the template where you want it in the tree. (Or use arrows below the personal templates tree view.)
 - 6. To save the template, click Apply. To save and exit the editor, click OK.

Editing Document Templates

You can change your personal templates and members of the Clinical Coordinator ASU class can change shared templates at any time.

To edit a document template, follow these steps:

- 1. Click the Notes, Consults, or D/C Summ tab.
- 2. Select Options | Edit Templates (Option | Edit Shard Templates to edit shared)

-or-

If the Templates drawer (Notes tab) is open, right-click in the drawer, and select Edit Templates.

- 3. Find the template you want to edit.
 - a. Click the plus sign next to an item to see the objects under it.
 - b. Click the template you want to edit.
- 4. Make any desired changes, like these:
 - Type in more text.
 - Add TIU objects.
 - Change the template name.
 - Move the template to a different location.
 - Make the template inactive if you don't want it seen in the template drawer.
 - If part of a group template, exclude it to make it not copy into a document when the group icon is dragged-and-dropped or double-clicked. Or, if excluded, you can click the check box to include it again.
 - Change the template type (template, group template)

- **NOTE**: If you change from a template or group template to a folder, you will lose the text in the template.
 - 5. To spell check or Check Boilerplate for Errors, right-click in the Boilerplate Template area and select the appropriate option.
 - 6. When finished, click Apply to save or click OK to save and exit the editor.

Creating Shared Document Templates

To create shared document templates, you must be a belong to the Clinical Coordinator ASU class.

You can then create templates containing text and TIU objects that will be available to all users.

To create shared templates, follow these steps:

- 1. Click the Notes, Consults, or D/C Summary tab.
- 2. Select Options | Create New Shared Template to bring up the Template Editor.

A template called "New Template" is created under Shared Templates..

- 3. In the Name field under Shared Template Properties, enter a name for the new template. Remember the template name requirements.
- 4. Click the template type: Template, Group Template, or folder. If you choose Folder, skip to step 6.
- 5. For templates and Group Templates, enter the text and TIU objects (if desired) to create the content. you can enter content in these ways:

Copy and paste from other documents

- Type in text
- Insert TIU objects
- Copy one of your personal templates
- **▼ NOTE**: After you enter the content, you can right-click in the Template Boilerplate area to select spell check or Check Boilerplate for Errors, which looks for invalid TIU objects.
 - 6. Find where you want to place the template in the tree view.
 - a. Click the plus sign next to an item to see the objects under it.
 - b. Drag-and-drop the template where you want it in the tree. (Or use arrows below the personal templates tree view.)
 - 7. To save the template, click Apply. To save and exit the editor, click OK.

▼ NOTE: You do not have to click Apply after each template, but it is recommended because if you click Cancel, you will lose all changes you have made since the last time you clicked Apply or OK.

Copying Document Templates

Users can copy a shared template into their personal templates. Clinical Coordinators can copy personal templates into the shared templates also. In addition, you can also copy a template and paste it elsewhere in the same personal or shared tree (hierarchy). Instructions for copying templates within a tree

To copy a shared template into personal, use these steps:

- 1. Click the Notes, Consults, or D/C Summ tab.
- 2. Select Options | Edit Templates

-or-

If the Templates "drawer" (Notes tab) is open, right-click in the drawer, and select Edit Templates.

- 3. Expand the personal template tree to show find where you will paste the shared template.
 - a. Click the plus sign next to an item to see the objects under it.
 - b. Continue until you find the right location.
 - c. Click the template under which you want the shared template.
- 4. Find the shared template you want to copy.
 - a. In the shared templates, click the plus sign next to items to see the objects under them.
 - b. Click the template you want to copy.
- 5. Click the arrow button between the trees, double-click the shared template, or drag-and-drop the shared template to the chosen location.
- *NOTE: At this point, the template is still a shared template. Changes to the original shared template will appear in your version also, which may be desirable. But if you change your version in any way, it becomes a personal template, the icon will have a folded corner and changes to the original will not affect your version.
 - 6. To save the template, click Apply. To save and exit the editor, click OK.

5. Miscellaneous Parameters

This option is for editing miscellaneous hospital-wide CPRS parameters, such as the length of time orders are displayed as Active after they have been completed, what prompts to suppress, whether to display statuses, etc.

```
Allocate OE/RR Security Keys
  KK
         Check for Multiple Keys
  DC
         Edit DC Reasons
        GUI Parameters ...
  GP
  МТ
        Miscellaneous Parameters
  NO
        Notification Mgmt Menu ...
        Order Checking Mgmt Menu ...
  OC
  MM
         Order Menu Management ...
        Patient List Mgmt Menu ...
  T<sub>1</sub>T
  FD
        Print Formats
  PR Print/Report Parameters ...
  RE
       Release/Cancel Delayed Orders
Select CPRS Configuration (Clin Coord) Option: mi Miscellaneous Parameters
Miscellaneous OE/RR Definition for System: OEX.ISC-SLC.VA.GOV
______
Active Orders Context Hours
                                                1
Auto Unflag
                                                YES
Confirm Provider
                                                NO
Default Provider
                                                YES
DC Generic Orders on Admission
DC Generic Orders on Transfer
                                                SPECIALTY TRANSFER
Error Days
                                                3.0
                                                90
Grace Days before Purge
Lapse Delayed Orders in #Days
                                                180
New Orders Default
                                                Sign All Orders
Restrict Requestor
Review on Patient Movement
                                                YES
Show Lab #
                                                YES
Show Status Description
                                                YES
Signature Default Action
                                                Release w/o Signature
Signed on Chart Default
ACTIVE ORDERS CONTEXT HOURS: 0// ??
This parameter defines the number of hours that orders remain in the
"Active/Current Orders" context after they have been completed.
ACTIVE ORDERS CONTEXT HOURS: 0// 2
AUTO UNFLAG: YES// ??
This parameter, when set to YES, will automatically cancel
the Flag Orders Notification and unflag all orders for a
patient when a user process a Flagged Orders Notification.
AUTO UNFLAG: YES// <Enter>
CONFIRM PROVIDER: NO// ??
This field will allow an additional prompt to confirm the provider
selection when adding new orders.
Entering 2 in this field will exclude holders of the ORES key
(providers) from this check.
Notice that these parameters also control the default presented to the user:
'Are you sure? <no -or- yes>'
```

Miscellaneous Parameters, cont'd

```
CONFIRM PROVIDER: NO// ?
Enter YES to prompt the user for confirmation whenever a provider is
entered.
Select one of the following:
          Ω
                    NO
                    YES (Default NO)
          1
          YES (Exclude ORES)
                    YES (Default YES)
CONFIRM PROVIDER: NO// 2 YES (Exclude ORES)
DEFAULT PROVIDER: YES// ??
This parameter allows the attending physician to be prompted as a default
when adding new orders.
DEFAULT PROVIDER: YES//<Enter>
DC GENERIC ORDERS ON ADMISSION: NO// ??
This parameter controls the DC'ing of generic orders (orders that are not
transmitted to any ancillary service for action) when a patient is
admitted. If set to YES, then generic orders are DC'd whenever a patient
is admitted to the hospital; if empty or set to NO, no automatic DC'ing
will take place on admission.
DC GENERIC ORDERS ON ADMISSION: NO// <Enter>
DC GENERIC ORDERS ON: SPECIALTY TRANSFER// ?
Select the type of transfer on which to DC a patient's generic orders.
      Select one of the following:
                    NONE
          0
                    WARD TRANSFER
          1
                    SPECIALTY TRANSFER
DC GENERIC ORDERS ON: SPECIALTY TRANSFER// <Enter>
ERROR DAYS: 1// ?
This response must be a number.
ERROR DAYS: 1//<Enter>
GRACE DAYS BEFORE PURGE: 30//<Enter>
LAPSE DELAYED ORDERS IN #DAYS: 180// ??
This parameter sets a limit on the number of days that delayed orders may
remain in the Orders file able to be released and activated. If a value
is entered here, then any order awaiting release via an MAS event that
has been in the Orders file more than the number days specified by this
value will be set to a status of "lapsed" instead of released to the
service for action. If no value is entered here, then the orders will be
processed regardless of the length of time they have been in the file
awaiting action.
LAPSE DELAYED ORDERS IN #DAYS: 180// <Enter>
NEW ORDERS DEFAULT: Sign All Orders// ??
This parameter determines the default action to be presented at the end of
the Review New Orders screen; the action 'Next Screen' will be used until
the last screen of orders, if there are more than one. If there is no
action specified here, then 'Sign All Orders' will be used.
NEW ORDERS DEFAULT: Sign All Orders// <Enter>
RESTRICT REQUESTOR: YES (ORELSE & OREMAS)// ??
This field allows a site to restrict the selection of providers
when adding new orders at the 'Requesting CLINICIAN: ' prompt for
holders of the ORELSE and OREMAS key. The restriction being that
they cannot select themselves as the requestor even though they may
also hold the PROVIDER key.
 1 YES (ORELSE)
                          -restricts only holders of the ORELSE key.
  2 YES (ORELSE & OREMAS) -restricts holders of either key.
RESTRICT REQUESTOR: YES (ORELSE & OREMAS)//<Enter>
```

Miscellaneous Parameters, cont'd

```
REVIEW ORDERS ON PATIENT MOVEMENT: YES// ??
This parameter allows orders to be reviewed when a patient is transferred
or discharged, and when a clinic appointment is made or canceled.
REVIEW ORDERS ON PATIENT MOVEMENT: YES//<Enter>
SHOW LAB #: NO// ??
This field controls the listing of lab orders for holders of the ORES key,
after the electronic signature has been entered when entering new orders.
Only after the order is released to Lab service is the number assigned;
if physicians want to see the lab order # with the order after entering
and signing the orders, this parameter must be set to YES. All other
users get the listing regardless of what this parameter is set to.
SHOW LAB #: NO//<Enter>
SHOW STATUS DESCRIPTION: YES// ??
This parameter allows the description associated with a status to be
displayed with the current status of an order when a detailed
display is requested.
SHOW STATUS DESCRIPTION: YES// <Enter>
SIGNATURE DEFAULT ACTION: Release w/o Signature// ?
Enter the desired default signature action for ORELSE key holders.
     Select one of the following:
          OC
                    Signed on Chart
          RS
                    Release w/o Signature
SIGNATURE DEFAULT ACTION: Release w/o Signature//<Enter>
SIGNED ON CHART DEFAULT: NO// ??
This defines the default value to be presented when the user gets the
prompt to mark orders as Signed on Chart; if no value is entered, then
NO is used as the default.
SIGNED ON CHART DEFAULT: NO// <Enter>
```

6. Notifications

Overview

The Notifications component in CPRS generates clinical alerts regarding patient information from DHCP packages such as CPRS, Lab, Radiology, and Consults. A notification consists of one line of text that is displayed to the user at sign-on and option prompts.

```
TRAT, JACK (T2342): New order(s) placed.
ANDERSON, (A3456): Order requires electronic signature.
ABC, PATIE (A4321): Medication order(s) unverified by nurse.
NIVEK, EPS (N4723): Medications nearing expiration.
```

Some notifications allow the user to perform a follow-up action to the notification. Notifications are deleted after being displayed and/or a follow-up action is taken. Sites have control over the use of CPRS Notifications at their Medical Centers. Kernel utilities handle the display, deletion, and follow-up actions for CPRS Notifications.

CPRS Notifications furnish providers with timely feedback regarding clinically relevant events. Some notifications allow the notification recipient to take direct follow-up action to the clinically relevant event.

The Team List utility (discussed in the next section) is used by the Notification utility to help identify potential notification recipients.

Setup

To initiate notifications after the CPRS installation is complete, do the following steps:

a. Enable Notifications, as needed by your site. Notifications are exported as disabled to allow the conversions and install to run more rapidly. To enable Notifications, use the Notification Mgmt Menu for CPRS Mgr [ORB NOT MGR MENU] under the CPRS Configuration Menu (Clin Coord), then pick Enable or Disable Notification System If your site is multidivisional, you can enable or disable the system for each division. If it isn't, or you want to enable for all divisions at once, select "System." For each division or the system enter "Enable" at the value prompt.

The new notifications that didn't exist in OE/RR 2.5 are exported as "disabled." This allows you to review and enable new notifications as needed by your site. Early installations of CPRS with all new notifications enabled tended to overwhelm users. Therefore, we recommend that you enable the new notifications for a few users at a time or a ward/clinic/service-section at a time.

b. Use the options on the Notification Management Menu to control the way notifications work for individuals, departments/services, or the entire medical center. (These options are described in following pages.)

c. Edit Site Local Terms

After CPRS installation, each site must run this option to link terms used in the expert system to local terms. Some terms like DNR and NPO diet must be mapped to one or more entries in the orderable item file. Other terms like Serum Creatinine must be mapped to the lab test file.

Nat'l Expert System Term	Linked File	Order Check
SERUM CREATININE	LAB [60]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65
SERUM UREA NITROGEN	LAB [60]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65
ANGIOGRAM,CATH – PERIPHERAL	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
PROTHROMBIN TIME	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
THROMBOPLASTIN TIME PARTIAL	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
WHITE BLOOD COUNT (WBC)	LAB [60]	CLOZAPINE APPROPRIATENESS
BLOOD SPECIMEN	TOPOG [61]	CLOZAPINE APPROPRIATENESS
SERUM SPECIMEN	TOPOG [61]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65

Edit Site Local Terms Example

Edit Site Local Terms Example, cont'd

```
Select National Term: PROTHROMBIN TIME
National Term: PROTHROMBIN TIME
Translated from file: 'ORDERABLE ITEMS' 101.43
    PROTHROMBIN TIME
                       (2623)
Select ORDERABLE ITEMS NAME: PT
    1 PT (2977)
        PT CONTROL
                     (2906)
    3 PT WITH MIX
                     (3391)
     4 PT. TEMP (2645)
       PTH (C-TERMINAL)
                           (2790)
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1 PT (2977)
National Term: PROTHROMBIN TIME
 Translated from file: 'ORDERABLE ITEMS' 101.43
    PROTHROMBIN TIME
                     (2623)
    PT
       (2977)
Select ORDERABLE ITEMS NAME: <Enter>
```

Mail message sent after automatic recompiling

```
Subj: Order Check Compiler Status [#16691] 13 Jan 98 10:53 14 Lines
From: POSTMASTER (Sender: GREEN, JOANN) in 'IN' basket. Page 1 **NEW**

The Order Check routine compiler has completed normally on JAN 13,1998 at 10:53 by [15] GREEN, JOANN.

ORDER CHECK EXPERT version 1.0 (rev15) released DEC 15,1997 at 12:18

Elapsed time: 6 minutes 50 seconds
Queued
Execution Trace Mode: ON
Elapsed time Logging Mode:
Raw Data Logging Mode: ON Keep data for 3 days then purge.
Lines of code generated: 7835

Select MESSAGE Action: IGNORE (in IN basket)//
```

Clean-up of OE/RR 2.5 Alerts

Some active notifications are converted to information-only alerts when CPRS 1.0 is installed, because CPRS no longer supports their follow-up action. The following alerts are converted:

Lab Results

Flagged Orders

Order Requiring Electronic Signature (Unsigned Orders)

Abnormal Lab Results

Critical Lab Results

Lab critical/abnormal/new result

Unsigned Progress Notes

Progress Notes Require Co-signature

The following alerts are now handled by TIU functionality and are no longer triggered by CPRS:

Unsigned Progress Note Progress Note Requires Co-signature

The following alerts are supported by CPRS and will not be converted:

Radiology Results
Abnormal Radiology Results
Radiology Request Cancel/Held
Consult/Request Cancel/Held
New Service Consult/Request

NOTE: Please notify your users that the above-mentioned alerts will be converted during install to make way for the new alerts and functionality of CPRS:

This is what the newly converted alerts will look like:

```
[CONV] OUTPATIEN (06641): Order requires electronic signature.
[CONV] AARON,OKP (A8900): LAB Critical GLUC.:NA:K:CA:PO4:URIC AC:...
[CONV] SO,PHILLI (S5293): Orders needing clarification.
```

Lab Alert Changes

The lab series of alerts have been altered to work in conjunction as follows:

- 1. Users who work from lab results should have the Lab Results alert enabled and the Abnormal Lab Results alerts disabled.
- 2. Users (most clinicians) should enable one of the Abnormal Lab Results alerts and disable the Lab Results alert.
- 3. The Critical Lab Results alert [Info] is usually mandatory and sent to everyone linked to the patient or the order.
- 4. Abnormal Lab Results [Action], Critical Lab Result [Action], and Lab Results have follow-up actions that show the results of the order for abnormal/critical tests and normal tests. For most users, they should have one of these alerts enabled but not both.
- 5. Abnormal Lab Result [Info] and Critical Lab Result [Info] display the result and collection date/time in the message and have no follow-up.

With these alerts, users can get alerts for all or abnormal lab results, then see the actual results of the order via follow-up action. To supplement this, critical lab results are displayed.

Notification Processing

A particular notification can be enabled (set to "Mandatory") or disabled by Users, Clinical Coordinators, or IRMS staff. Clinical Coordinators or IRMS staff can make a notification mandatory by setting its value to "Mandatory." This is accomplished by using options on the Notifications Management Menus. For example, the notification LAB RESULTS is exported as "disabled." A site may want to "enable" this notification. Once enabled, the LAB RESULTS notification will be sent to all appropriate users. Notifications are deleted after being selected in the VIEW ALERTS option and/or a follow-up action is taken.

Notifications recipients

- Ordering clinician/provider
- Members of a defined team related to the ordering clinician/ provider (Order Requires Electronic Signature and Order Requires Co-Signature notifications only)
- Providers with the notification patient on one or more of their patient lists (personal or team)
- Patient's attending physician
- Patient's primary provider

When Notifications can be seen

- When you sign onto the system.
- After you reach a menu display and are prompted to "Select OPTION:" This includes notifications occurring since the last time you were at a "Select OPTION" prompt.
- If you select "VIEW ALERTS" at any "Select OPTION" prompt.
- In Windows (GUI) when you select a new patient.

Notification Actions

- Some Notifications are information-only and disappear after you select them.
- Other Notifications require a follow-up action before they are removed. The follow-up action takes you to a screen to perform the desired action.
- To review notifications and/or take follow-up action, select the VIEW ALERTS option, and enter the number(s) of the notification(s) you wish to process. You can also enter the following:
 - A to process all of the pending alerts in the order shown.
 - I to process all of the INFORMATION ONLY alerts, if any
 - P to print a copy of the pending alerts on a printer
 - M to receive a MailMan message containing a copy of these pending alerts
 - F to Forward alerts
 - R to Redisplay the available alerts
 - ^ to exit

Notification Management Menu

Option	Description
1. Enable/Disable Notifications	Turns notifications on or off for a user, team, location, service,
1, 2, 4, 5, 5, 5, 6, 6, 7, 6, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	divisions, or system.
2. Erase Notifications	This option lets you erase all notifications for a user, patient or a
2. Brase I vourrounding	specific notification.
3. Set Urgency for Notifications	This option lets you set the urgency for a notification to high,
(GUI)	moderate, or low.
4. Set Deletion Parameters for	This option lets you specify under what circumstances a notification
Notifications	is deleted after a review action.
5. Set Default Recipient(s) for	This option lets you specify whether a notification is sent to a user or
Notifications	a team.
6. Set Default Recipient Device(s)	This option lets you specify whether division and system devices
for Notifications	receive notifications.
7. Set Provider Recipients for	This option lets you specify which providers receive notifications on
Notifications	a patient.
8. Flag Orderable Item(s) to Send	This option contains two sub-options to flag specific orderable items
Notifications	to send notifications when they are ordered, resulted, or expiring.
9. Archive(delete) after <x> Days</x>	This option sets the number of days to save notifications after action
	is taken on them.
10. Forward Notifications	These options let you specify a number of days a notification waits
Forward Unprocessed	without action before forwarding it to the supervisor or the mailman
Notification to Supervisor	surrogate.
Forward Unprocessed	
Notification to Surrogates	
11. Set Delays for Unverified	Enter the number of hours' delay to wait after an order is placed
Orders	before triggering an Unverified Order or Unverified Medication
Set Delay for All Unverified	Order notification/ alert. The maximum number of hours is 10,000.
Orders	
Set Delay for Unverified	
Medication Orders	
12. Set Notification Display Sort	This option lets you specify the GUI display order for user, division,
Method (GUI)	and system.
13. Send Flagged Orders Bulletin	This option lets you specify if a bulletin is sent when an order is
14.5	flagged for clarification.
14. Determine Recipients for a	Debugging tool to determine if and why a user receives a
Notification	notification.
15. Display Patient Alerts and	This option lets you see all Kernel Alerts for a patient or recipients
Alert Recipients	of selected alerts along with relevant data. This option uses the Alert Tracking file [^XTV(8992.1].
16. Enable or Disable Notification	This option determines if any notification processing will occur in
System	the entire Notifications system. Can be set at the Institution or
System	System level.
17. Display the Notifications a	This option prompts for a user/recipient then processes each
User Can Receive	notification to determine if and why the user will receive the
	notification. This information is then displayed.
18. Set Surrogate Notification	This option lets you set up a surrogate to receive all notifications for
Recipient for a User	a user.

Notifications Management Menu Option Descriptions

Enable/Disable Notifications [ORB3 PROCESSING FLAG]

This option allows a coordinator or user to turn specific notifications on or off.

E (Enabled): notification enabled for entity unless entity of higher precedence has notification disabled (e.g. Enabled at System level and Disabled at User level - User will not receive notification.)

D (Disabled): notification disabled for entity unless entity of higher precedence has notification enabled (see the Recipient Matrix) (e.g. Disabled at System level and Enabled at User level - User will receive notification.)

NOTE: If a coordinator or IRMS person has answered "Yes" in the option *Set Default Recipients for Notification*, indicating that the user should *always* receive the notification, that Team or User will always receive the notification, regardless of the Enabled/Disabled settings.

Enable/Disable Notifications Example

```
Select Notification Mgmt Menu Option: 1 Enable/Disable Notifications
                 Set PROCESSING FLAG Parameters for Notifications
may be set for the following:
    1 User USR [choose from NEW PERSON]
2 Team TEA [choose from TEAM]
3 Service SRV [choose from SERVICE/SECTION]
4 Location LOC [choose from HOSPITAL LOCATION]
5 Division DIV [REGION 5]
6 System SYS [OEX.ISC-SLC.VA.GOV]
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: MALMROSE, CARY
                                                    DM
                                                                  Father John
     ------ Setting for User: MALMROSE,CARY
Select Notification: ??
     Notification
                                        Value
     ORDER REQUIRES ELEC SIGNATURE Enabled
 Answer with OE/RR NOTIFICATIONS NUMBER, or NAME, or PACKAGE ID, or
     MESSAGE TEXT, or RECIPIENT USERS
 Do you want the entire 47-Entry OE/RR NOTIFICATIONS List? y (Yes)
   Choose from:
               LAB RESULTS
                ORDER REQUIRES CHART SIGNATURE
               FLAG ORDER FOR CLARIFICATION
   12
               ORDER REQUIRES ELEC SIGNATURE
              ABNORMAL LAB RESULTS (ACTION)
              ADMISSION
UNSCHEDULED VISIT
   18
   19
              DECEASED PATIENT
   20
              IMAGING PATIENT EXAMINED IMAGING RESULTS
   21
   22
   23
               CONSULT/REQUEST RESOLUTION
   24
                CRITICAL LAB RESULT (INFO)
                ABNORMAL IMAGING RESULTS
                IMAGING REQUEST CANCEL/HELD
```

```
NEW SERVICE CONSULT/REQUEST
   2.8
               SERVICE ORDER REQ CHART SIGN
   30
               CONSULT/REQUEST CANCEL/HOLD
   31
               NPO DIET MORE THAN 72 HRS
   32
               FLAGGED OI RESULTS - INPT
               ORDERER-FLAGGED RESULTS
   33
              DISCHARGE
   35
   36
               TRANSFER FROM PSYCHIATRY
   37
              ORDER REQUIRES CO-SIGNATURE
   41
              FLAGGED OT ORDER - INPT
   42
               LAB ORDER CANCELED
              STAT ORDER
   44
               STAT RESULTS
              DNR EXPIRING
   45
              FREE TEXT
   46
   47
               MEDICATIONS EXPIRING
              UNVERIFIED MEDICATION ORDER
   50
              NEW ORDER
   51
              STAT IMAGING RECUEST
   52
             URGENT IMAGING REQUEST
               IMAGING RESULTS AMENDED
   54
              ORDER CHECK
   55
              FOOD/DRUG INTERACTION
   56
              ERROR MESSAGE
             CRITICAL LAB RESULTS (ACTION)
              ABNORMAL LAB RESULT (INFO)
             UNVERIFIED ORDER
   59
             FLAGGED OI RESULTS - OUTPT
   60
   61
              FLAGGED OI ORDER - OUTPT
              DC ORDER
   63
              CONSULT/REQUEST UPDATED
              FLAGGED OI EXPIRING - INPT
              FLAGGED OI EXPIRING - OUTPT
Notification: STAT RESULTS// <Enter> STAT RESULTS STAT RESULTS
Value: ?
Code indicating processing flag for the entity and notification.
Select one of the following:
          M
                     Mandatory
          \mathbf{E}
                     Enabled
          D
                     Disabled
Value: e Enabled
```

Disabling a Notification

Disabling a notification follows the same process, but it seems counterintuitive. When the program asks if you want to add a new Notification, logically you'd want to say "No," but the program is really asking if you want to add a new notification to a temporary list for consideration about enabling or disabling. The program is using a generic FileMan call—we hope that in the near future a more user-friendly utility will be written for this option.

```
Select Notification Mgmt Menu Option: 1 Enable/Disable Notifications

Set PROCESSING FLAG Parameters for Notifications

Processing Flag may be set for the following:

1 User USR [choose from NEW PERSON]
2 Team (OE/RR) OTL [choose from OE/RR LIST]
3 Service SRV [choose from SERVICE/SECTION]
4 Location LOC [choose from HOSPITAL LOCATION]
5 Division DIV [REGION 5]
6 System SYS [OEX.ISC-SLC.VA.GOV]
7 Package PKG [ORDER ENTRY/RESULTS REPORTING]
```

```
Enter selection: 1 User
                         NEW PERSON
Select NEW PERSON NAME: GREEN, JOANN
                                         iа
----- Setting Processing Flag for User: GREEN, JOANN -----
Select Notification: ?
    Notification
                                 Value
    LAB RESULTS
                                 Disabled
    ORDER REQUIRES ELEC SIGNATURE Mandatory
    CRITICAL LAB RESULT (INFO) Mandatory
    STAT RESULTS
                                 Mandatory
    FREE TEXT
                                 Disabled
Answer with OE/RR NOTIFICATIONS NUMBER, or NAME, or PACKAGE ID, or
    MESSAGE TEXT, or RECIPIENT USERS
Do you want the entire 41-Entry OE/RR NOTIFICATIONS List? N (NO)
Select Notification: ADMISSION
Are you adding ADMISSION as a new Notification? Yes// <Enter>
                                                              YES
Notification: ADMISSION// <Enter> ADMISSION ADMISSION
Value: Disabled
Select Notification: <Enter>
```

Erase Notifications [ORB3 ERASE NOTIFICATIONS]

This option allows you to do one of the following:

- 1. Erase all notifications for a User
- 2. Erase all notifications for a Patient
- 3. Erase all instances of a notification (regardless of Patient or User)

Set Urgency for Notifications (GUI) [ORB3 URGENCY]

This option lets you set the Urgency for a notification. The urgency is mainly used for sorting in GUI displays. The Urgencies include:

- 1 (High): notification is Highly urgent.
- 2 (Moderate): notification is Moderately urgent.
- 3 (Low): notification is of Low urgency.

Set Deletion Parameters for Notifications [ORB3 DELETE MECHANISM]

This option lets you set parameters to determine deletion conditions.

It uses a set of codes to determine how a notification will be deleted at a site. The codes include:

- I (Individual Recipient): delete the notification for an individual recipient when:
 - a) that individual completes the follow-up action on notifications with associated follow-up action.
 - b) that individual reviews notifications without follow-up actions.

- **A** (All Recipients): delete the notification for all recipients when:
 - a) any recipient completes the follow-up action on notifications with follow-up actions.
 - b) any recipient reviews notifications without follow-up actions.

Set Default Recipient(s) for Notifications [ORB3 DEFAULT RECIPIENTS]

Enter "Yes" if the recipient should always receive this notification. Recipients (users, teams) will receive the notification on a regular basis—despite settings in the option Enable/Disable Notifications. These recipients will always receive the notification, regardless of patient.

Set Default Recipient Device(s) for Notifications [ORB3 DEFAULT DEVICE RECIPIENTS]

Enter "Yes" if the device (from the Device file) should always receive this notification. Recipient devices will receive the notification on a regular basis—despite settings in the option Enable/Disable Notifications. These recipient devices will always receive the notification, regardless of patient.

Set Provider Recipients for Notifications [ORB3 PROVIDER RECIPIENTS]

This option lets you set any one or combination of a set of codes indicating default [provider] recipients of a notification by their title or relationship to the patient. Notifications can be set up with any or all of the following codes:

- P (Primary Provider): deliver notification to the patient's Inpatient Primary Provider.
- A (Attending Physician): deliver notification to the patient's Attending Physician
- T (Patient Care Team): deliver notification to the patient's primary care Team.
- O (Ordering Provider): deliver notification to the provider who placed the order that triggered the notification.

The providers, physicians, and teams must be set up properly and accurately for the correct individuals to receive the notification.

Flag Orderable Item(s) to Send Notifications [ORB3 FLAG ORDERABLE ITEMS]

This option has two sub-options to flag specific orderable items to send notifications when they are ordered, resulted, or expiring.

Archive(delete) after <x> Days [ORB3 ARCHIVE PERIOD]

Enter the number of days to archive this notification before deletion in the Alert Tracking file. If not indicated, the default period of 30 days is used. The maximum number of days is 100,000 or about 220 years. This value is passed to the Kernel Alert Utility where the actual archiving and deletion of alerts/notifications occurs.

Forward Unprocessed Notification to Supervisor [ORB3 FORWARD SUPERVISOR]

This option lets you set the number of days to hold a notification before forwarding it to the recipient's supervisor. The maximum is 30 days. If not indicated or zero, the notification will not be forwarded. For example, if a notification has a value of 14 for this option, it will be forwarded to the supervisor of each recipient who hasn't processed the notification after 14 days. Determination of recipients who have not processed the notification and who their supervisors are is made by the Kernel Alert Utility. Kernel identifies the supervisor as the service chief of the user's service. The notification will not be forwarded to supervisors of recipients who have processed the alert within 14 days. If the value of this option is zero or non-existent, the alert/notification will never be forwarded. Forwarding of unprocessed alerts is triggered by the option XQALERT DELETE OLD. This option is a Kernel option that should be tasked to run periodically. In addition to forwarding alerts, it cleans up old alerts greater than 14 days old.

Forward Unprocessed Notification to Surrogates [ORB3 FORWARD SURROGATES]

This option lets you set the number of days before a notification is forwarded to a recipient's Mailman surrogates. The maximum is 30 days. If not indicated or zero, the notification will not be forwarded. For example, if a notification has a value of 14 for this option, it will be forwarded to the Mailman surrogates of each recipient who hasn't processed the notification after 14 days.

The Kernel Alert Utility determines recipients who have not processed the notification and their Mailman surrogates. If the value of this option is zero or non-existent, the alert/notification will never be forwarded. Forwarding of unprocessed alerts is triggered by the option XQALERT DELETE OLD, a Kernel option that should be tasked to run periodically. In addition to forwarding alerts, it cleans up old alerts greater than 14 days old.

Example of forwarded alerts:

```
1. HOOD,ROBI (H2591): New order(s) placed.
Forwarded by: ANDERSON,CURTIS Generated: 07/02/97 16:26:36
ALERT NOT PROCESSED BY ANDERSON,CURTIS

2. FEET,SMEL (F1990): New order(s) placed.
Forwarded by: ANDERSON,CURTIS Generated: 07/02/97 14:40:32
ALERT NOT PROCESSED BY ANDERSON,CURTIS
```

For this notification to work, a link must exist between the term DNR used by the CPRS expert system and each site's local term used to denote DNR. After CPRS installation, each site must run the option OCX NATIONAL TERM EDIT (on the CPRS Configuration Menu (IRM). This option links terms used in the expert system to local terms. Some terms like DNR and NPO diet must be mapped to one or more entries in the orderable item file. Other terms like Serum Creatinine must be mapped to the lab test file.

Set Delays for Unverified Orders [ORB3 UNVERIFIED ORDERS MENU]

This menu provides access to options that set up parameters for delaying unverified orders alert triggers.

Set Delay for All Unverified Orders [ORB3 UNVERIFIED ORDER]

This option lets you enter the number of hours delay to wait after an order is placed before triggering an Unverified Order notification/alert. The maximum number of hours is 10,000.

Set Delay for Unverified Medication Orders [ORB3 UNVERIFIED MED ORDER]

This option lets you enter the number of hours delay to wait after a medication order is placed before triggering an Unverified Medication Order notification/alert. The maximum number of hours is 10,000.

Set Notification Display Sort Method (GUI) [ORB3 SORT METHOD]

This option lets you determine the order in which items of a notification are displayed in the GUI. The items include: by Patient, by Type (Notification name), and by Urgency. Within these sort methods notifications are presented in reverse chronological order.

Send Flagged Orders Bulletin [ORB3 FLAGGED ORDERS BULLETIN]

This option lets you indicate whether to send a bulletin when an order is flagged for clarification. "Yes" indicates a MailMan bulletin will be sent to the order's Current Provider (usually the Ordering Provider). This option has no effect on the Flagged Orders notification which is also triggered when an order is flagged for clarification.

Determine Recipients for a Notification [ORB3 DETERMINE RECIPIENTS]

This option lets you create a simulated notification recipient list, without sending the alert. You are prompted for information about recipients: patient, and notification, with the option to enter an order number and/or a recipient. Output can be directed to a device. This option is intended to serve as a tool to help determine why a user did or did not receive a particular notification. Please note: if team lists, patient-provider relationships (e.g. Attending and Primary), and/or parameter values have changed between the moment when the original notification was triggered and when this option is triggered, the outcome of the recipient list may be different.

Display Patient Alerts and Alert recipients [ORB3 ALERT RECIPIENTS]

This option produces a list of all OE/RR alerts for a specified patient for the dates you enter. You can also get a detailed listing on specific alerts attached to the patient record. The detailed report shows each recipient and gives dates and times of key actions concerning the alert (such as 1st displayed, processed, deleted, etc.)

In the following example, the alerts are listed for a specific patient and details are listed on one of the alerts. The order number, if it exists, (and sometimes other information) is included in brackets after the alert name. This information is here for troubleshooting purposes.

Display Patient Alerts and Alert recipients example

```
Select Notification Mgmt Menu Option: 15 Display Patient Alerts and Alert Recip
PATIENT (reg'd): doe, WILLIAM C
                                       9-12-44
                                                 243236572
                                                                       SC VETE
RAN
Enrollment Priority: GROUP 1
                                Category: IN PROCESS
                                                       End Date:
Start Date/Time (reg'd): T-30// (JUL 22, 2000)
End Date/Time (req'd): NOW// (AUG 21, 2000@14:27)
Processing.....
            ALERTS FOR PATIENT: DOE, WILLIAM C
    [2B M] WARFARIN TAB ordered - adjust diet according
                                                               8/18/00@15:51
     [2B M] New order(s) placed. [7094486]
                                                               8/18/00@10:00
     [2B M] New order(s) placed. [7095466]
                                                               8/18/00@09:45
                                         SERUM LC LB # [70954648/18/00@09:42
     Lab order canceled: POTASSIUM BLOOD
     Lab order canceled: POTASSIUM BLOOD
                                         SERUM LC LB # [70954628/18/00@09:42
     Lab order canceled: POTASSIUM BLOOD
                                          SERUM LC LB # [70954638/18/00@09:42
     Lab order canceled: POTASSIUM BLOOD
                                         SERUM LC LB # [70954618/18/00@09:41
     Lab order canceled: POTASSIUM BLOOD
                                          SERUM LC LB # [70954608/18/00@09:41
     Lab order canceled: POTASSIUM BLOOD
                                          SERUM WC LB # [70954588/18/00@09:41
10
    Lab order canceled: POTASSIUM BLOOD
                                         SERUM WC LB # [70954598/18/00@09:41
     [2B MED] New DC order(s) placed. [7095457]
                                                               8/18/00@09:41
Enter alerts to display in detail:
```

```
BUECHLER, MELANIE
  1st displayed to recipient:
  1st selected by recipient:
 Processed by recipient:
 Deleted via follow-up:
  Auto deleted:
  Forwarded by:
Press RETURN to continue or '^' to exit:
RECIPIENTS OF ALERTS FOR PATIENT: DOE, WILLIAM C. Page:
  Forwarded to recipient:
RUSSELL, JOEL
 1st displayed to recipient: Nov 18, 1997@11:47:53
  1st selected by recipient:
  Processed by recipient:
 Deleted via follow-up:
 Auto deleted:
 Forwarded by:
 Forwarded to recipient:
- End of Report -
Press RETURN to continue:
Select Notification Mgmt Menu Option:
```

Enable or Disable Notification System [ORB3 ENABLE/DISABLE]

This option turns on or off the entire Notifications system for a medical center.

Display the Notifications a User Can Receive [ORB3 RECIP NOTIFICATIONS]

This is a debugging tool to help determine why (or why not) notifications are being received by a particular individual. It lists each notification and its processing flag. It also lists the reason for the processing flag value.

*OERR is the exported value for a parameter. It can't be altered at a site.

Example

```
Select Notification Mgmt Menu for OE/RR Mgr Option: 17 Display the Notifications a User Can Receive Enter user's name: ROBINSON, TOM//<Enter>
Would you like help understanding the list of notifications? No//<Enter>(No)
This will take a moment or two, please stand by.................
DEVICE: HOME//<Enter> ALPHA
```

Example Notifications List

Notification List for ROBINSON, TOM Page: 1			
Notification (ON/OFF	For This User and Why	
ABNORMAL IMAGING RESULTS	ON	OERR value is Mandatory	
ABNORMAL LAB RESULT (INFO)	OFF	User's service MEDICINE value is Disabled	
ABNORMAL LAB RESULTS (ACTION)		OERR value is Disabled	
ADMISSION	ON	OERR value is Enabled	
CONSULT/REQUEST CANCEL/HOLD	ON	OERR value is Enabled	
CONSULT/REQUEST RESOLUTION	ON	OERR value is Enabled	
CONSULT/REQUEST UPDATED	OFF	OERR value is Disabled	
CRITICAL LAB RESULT (INFO)	ON	OERR value is Mandatory	
CRITICAL LAB RESULTS (ACTION)	ON	OERR value is Mandatory	
DC ORDER	OFF	OERR value is Disabled	
DECEASED PATIENT	ON	OERR value is Enabled	
DISCHARGE	OFF	OERR value is Disabled	
DNR EXPIRING	OFF	OERR value is Disabled	
ERROR MESSAGE	OFF	User's service MEDICINE value is Disabled	
FLAG ORDER FOR CLARIFICATION	ON	OERR value is Enabled	
FLAGGED OI EXPIRING - INPT	OFF	OERR value is Disabled	
FLAGGED OI EXPIRING - OUTPT	OFF	OERR value is Disabled	
FLAGGED OI ORDER - INPT	OFF	OERR value is Disabled	
FLAGGED OI ORDER - OUTPT	ON	System value is Enabled	
FLAGGED OI RESULTS - INPT	OFF	OERR value is Disabled	
FLAGGED OI RESULTS - OUTPT	OFF	OERR value is Disabled	
FOOD/DRUG INTERACTION	OFF	OERR value is Disabled	
FREE TEXT	OFF	OERR value is Disabled	
IMAGING PATIENT EXAMINED	ON	OERR value is Enabled	
IMAGING REQUEST CANCEL/HELD	ON	OERR value is Enabled	
IMAGING RESULTS	ON	OERR value is Enabled	
IMAGING RESULTS AMENDED	OFF	OERR value is Disabled	
LAB ORDER CANCELED	OFF	OERR value is Disabled	
LAB RESULTS	OFF	OERR value is Disabled	
MEDICATIONS EXPIRING	OFF	OERR value is Disabled	
NEW ORDER	ON	Division ISC SALT LAKE value is Mandatory	
NEW SERVICE CONSULT/REQUEST	ON	OERR value is Enabled	
NPO DIET MORE THAN 72 HRS	OFF	OERR value is Disabled	
ORDER CHECK	OFF	OERR value is Disabled	
ORDER CHECK ORDER REQUIRES CHART SIGNATURE	ON	OERR value is Mandatory	
ORDER REQUIRES CO-SIGNATURE	OFF	OERR value is Disabled	
ORDER REQUIRES ELEC SIGNATURE	ON	Division ISC SALT LAKE value is Mandatory	
ORDERER-FLAGGED RESULTS	OFF	OERR value is Disabled	
		OERR value is Mandatory	
SERVICE ORDER REQ CHART SIGN	ON	OERR value is Mandatory OERR value is Disabled	
STAT IMAGING REQUEST	OFF	OERR value is Disabled OERR value is Disabled	
STAT ORDER	OFF		
STAT RESULTS	OFF	OERR value is Disabled	
TRANSFER FROM PSYCHIATRY	OFF	OERR value is Disabled	
UNSCHEDULED VISIT	ON	OERR value is Enabled	
UNVERIFIED MEDICATION ORDER	OFF	OERR value is Disabled	
UNVERIFIED ORDER	OFF		
URGENT IMAGING REQUEST	OFF	OERR value is Disabled	
- End of Report -			

Explanations of ON/OFF For This User and Why

Reason	Explanation	
Division/System value is Mandatory	The site determined that the notification is mandatory for	
	either a division or a hospital.	
OERR value is Mandatory	The notification is exported as mandatory.	
OERR value is Disabled	The notification is exported as disabled by CPRS.	
No Disabled values found	This notification is enabled since no one (a manager,	
	coordinator, or user) has disabled it.	
User value is Enabled	A manager, coordinator, or user has enabled this	
	notification for this user.	
User value is Disabled	A manager, coordinator, or user has disabled this	
	notification for this user.	
Division value is Disabled	A manager or coordinator has disabled this notification for	
	the division.	
System value is Disabled	A manager or coordinator has disabled this notification for	
	the system.	

Set Surrogate Notification Recipient for a User [ORB3 SET SURROGATE RECIPIENT]

This option sets up a surrogate to receive all notifications (OE/RR alerts) for a user.

```
Subj: Surrogate Recipient for OE/RR Notifications/Alerts [#16738]
13 Jan 98 16:16 2 Lines
From: GREEN, JOANN in 'IN' basket. Page 1 **NEW**

You have been designated as the surrogate to receive OE/RR Notifications/Alerts for ANDERSON, CURTIS.

Select MESSAGE Action: IGNORE (in IN basket)//
```

7. Order Checking

Order checking, a component of order entry, is based on a system of rules, which review orders to see if they meet defined criteria. If they meet the criteria, an electronic message is sent to the ordering provider before the order is completed (such as duplicate order, drug-lab interaction, etc.). The provider can then choose to cancel the order or override the order check and place the order.

NOTE: All order checks are exported disabled at the system level. When IRMS turns them on at the system level, they are then turned on for everyone. IRMS, Clinical Coordinators, individuals, or services can then disable individual order checks if they choose to.

IMPORTANT: If your site doesn't want individuals to be able to disable order checks, consider not assigning users the option *Enable/Disable Order Checks*.

Relationship of Order Checking to Notifications

Order Checks are similar to Notifications in that both review existing data and current events to produce a relevant message that is presented to patient care-givers. Also, both systems use the CPRS expert system (OCX namespace), to define logical expressions for this evaluation and message creation. In addition to the expert system, both systems have some hard-coded algorithms. For example, the critical drug interaction order check is made via an entry point in the pharmacy package whereas renal functions for patients over 65 is defined as a rule in the CPRS expert system.

The main difference between the two systems is their focus. Order Checks are a real-time process that occurs during the ordering session and are driven by responses entered by the ordering provider. Order Check messages are displayed interactively in the ordering session. In contrast, Notifications occur behinds the scenes, monitoring data as it flows through DHCP and when certain trigger events occur.

Order Checking, cont'd

How does Order Checking work?

Order Checking performs checks while ordering is taking place.

Before orders go to services such as Lab and Pharmacy, they are sent to Order Checking where the ordered item is evaluated by an expert system rule against data from patient files. If one or more of the designated rules of logic for that type of order is met, order check messages are presented to the clinician placing the order.

Order checks exported with CPRS

ALLERGY-CONTRAST MEDIA INTERACTION

ALLERGY-DRUG INTERACTION

AMINOGLYCOSIDE ORDERED

BIOCHEM ABNORMALITY FOR CONTRAST MEDIA

CLOZAPINE APPROPRIATENESS

CRITICAL DRUG INTERACTION

CT & MRI PHYSICAL LIMITATIONS

DISPENSE DRUG NOT SELECTED

DUPLICATE DRUG CLASS ORDER

DUPLICATE DRUG ORDER

DUPLICATE ORDER (Non-Med)

ERROR MESSAGE

ESTIMATED CREATININE CLEARANCE

GLUCOPHAGE-CONTRAST MEDIA

LAB ORDER FREO RESTRICTIONS

MISSING LAB TESTS FOR ANGIOGRAM PROCEDURE

ORDER CHECKING NOT AVAILABLE

POLYPHARMACY

RECENT BARIUM STUDY

RECENT ORAL CHOLECYSTOGRAM

RENAL FUNCTIONS OVER AGE 65

SIGNIFICANT DRUG INTERACTION

Note: The DRUG-DRUG INTERACTION order check has been renamed CRITICAL DRUG INTERACTION. All parameter values associated with DRUG-DRUG are now associated with CRITICAL DRUG INTERACTION. A new order check, SIGNIFICANT DRUG INTERACTION, has been added to the Order Check File ([#100.8]. The exported, package-level parameter values for this new order check are ORK PROCESSING FLAG = "Enabled" and ORK CLINICAL DANGER LEVEL = "Moderate". The new order check lets sites designate significant drug interaction with a lower clinical danger level.

REMEMBER: All of these order checks are exported disabled at the system level. When IRMS turns them on at the system level, they are then turned on for everyone. IRMS, Clinical Coordinators, individuals, or services can then disable individual order checks if they choose to.

Order Checking Management Menu

Several parameters must be set before certain order checks can work properly. Options in the Order Checking Management Options Menu allow you to set these parameters.

Option	Description
1 Enable/Disable an Order Check	Enter the processing flag for an entity.
2 Set Clinical Danger Level for an	Enter the code indicating the clinical danger level of
Order Check	an order check.
3 CAT Scanner Height Limit	Enter a value in inches witch Order Checking uses
	to see if a patient is too tall to be examined by the
	CAT scanner.
4 CAT Scanner Weight Limit	Enter a value in pounds witch Order Checking uses
	to see if a patient weighs too much to be examined
	by the CAT scanner.
5 MRI Scanner Height Limit	Enter a value in inches witch Order Checking uses
	to see if the patient is too tall to be safely examined
	by the MRI Scanner.
6 MRI Scanner Weight Limit	Enter a value in pounds witch Order Checking uses
	to see if the patient weighs too much to be safely
	examined by the MRI Scanner
7 Orderable Item Duplicate Order	Enter the number of hours back in time too check
Range	for duplicate orders for a specific orderable item.
8 Lab Duplicate Order Range	Enter the number of hours back in time to check for
	duplicate Lab orders.
9 Radiology Duplicate Order	Enter the number of hours back in time to check for
Range	duplicate Radiology orders.
10 Enable or Disable Order	Turns order checking on or off for the entire
Checking System	institution or for a single division.
11 Enable or Disable Debug	Turn Debug Message Logging on or off
Message Logging	
12 Display the Order Checks a	Produces a report giving the Enable/ Disable status
User Can Receive	of each order check for a particular user.
13 Edit Site Local Terms	Map local orderable items or laboratory test names
	to standard terms used by the Order Checking
	system.
14. Set Number of Medications for	Use this option to set the number of medications for
Polypharmacy	determining polypharmacy.

NOTE: The pharmacy duplicate order range is not determined by CPRS parameters. It is determined within the Pharmacy packages. See the Pharmacy National Drug File (NDF) documentation for a list of Pharmacy order checks.

Order Checking, cont'd

Enable/Disable an Order Check

Use this option to turn specific order checks on or off for a user or location. The option works by entering a processing flag for an entity and order check. The entity can be a user, location, service, division, or system.

Processing flags

E (Enabled): Order check is enabled for the entity unless an entity of higher precedence has order check disabled (e.g. if Enabled at System level and Disabled at User level, order check is not processed).

D (Disabled): Order check is disabled for the entity unless an entity of higher precedence has the order check Enabled (e.g. if Disabled at System level and Enabled at User level, order check is processed).

Example

```
Select Order Checking Management Options Option: 1 Enable/Disable an Order
                     Enable/Disable an Order Check
may be set for the following:
    USER USR [choose from NEW PERSON]
LOCATION LOC [choose from HOSPITAL LOCATION]
Service SRV [choose from SERVICE/SECTION]
Division DIV [REGION 5]
System SYS [OEX.ISC-SLC.VA.GOV]
Enter selection: 1 User NEW PERSON
Select NEW PERSON NAME: SNOW, CHARLES R.
                                                 CRS PHYSICIAN
----- Setting for User: SNOW, CHARLES R. -----
    Order Check
                                     Value
    DUPLICATE ORDER
                                   Enabled
Select Order Check: ?
Answer with ORDER CHECKS NAME
Do you want the entire 21-Entry ORDER CHECKS List? Y (Yes)
Choose from:
   ALLERGY-CONTRAST MEDIA INTERAC
   ALLERGY-DRUG INTERACTION
   AMINOGLYCOSIDE ORDERED
   BIOCHEM ABNORMALITY FOR CONTRA
   CLOZAPINE APPROPRIATENESS
   CRITICAL DRUG INTERACTION
   CT & MRI PHYSICAL LIMITATIONS
   DISPENSE DRUG NOT SELECTED
   DUPLICATE DRUG CLASS ORDER
   DUPLICATE DRUG ORDER
   DUPLICATE ORDER
   ERROR MESSAGE
   ESTIMATED CREATININE CLEARANCE
   GLUCOPHAGE-CONTRAST MEDIA
   LAB ORDER FREQ RESTRICTIONS
   MISSING LAB TESTS FOR ANGIOGRA
   ORDER CHECKING NOT AVAILABLE
   POLYPHARMACY
```

Order Checking, cont'd

Enable/Disable an Order Check, cont'd

```
RECENT BARIUM STUDY
  RECENT ORAL CHOLECYSTOGRAM
  RENAL FUNCTIONS OVER AGE 65
  SIGNIFICANT DRUG INTERACTION
    Order Check
                                 Value
    DUPLICATE ORDER
                                  Enabled
Select Order Check: ESTIMATED CREATININE CLEARANCE
Are you adding ESTIMATED CREATININE CLEARANCE as a new Order Check? Yes//
<Enter> YES
    1
       Enabled
    2
        Disabled
Choose 1-2: 1 Enabled
Value: Enabled
Select Order Check: <Enter>
may be set for the following:
        User
                      USR
                             [choose from NEW PERSON]
                  SRV
                             [choose from HOSPITAL LOCATION]
        Location
                             [choose from SERVICE/SECTION]
    3
        Service
                    DIV [REGION 5]
       Division
                    SYS
       System
                            [OEX.ISC-SLC.VA.GOV]
Enter selection: <Enter>
Select Order Checking Management Option:
```

Set Clinical Danger Level for an Order Check

Enter the code indicating the clinical danger level of an order check. Order checks come with a pre-set danger level as given in the following table:

PARAMETER: ORK CLINICAL DANGER LEVEL ENTITY: ORDER ENTRY/RESULTS REPORTING			
Order Check	Value		
ALLERGY-CONTRAST MEDIA INTERAC	High		
ALLERGY-DRUG INTERACTION	High		
AMINOGLYCOSIDE ORDERED	High		
BIOCHEM ABNORMALITY FOR CONTRA	High		
CLOZAPINE APPROPRIATENESS	High		
CRITICAL DRUG INTERACTION	High		
CT & MRI PHYSICAL LIMITATIONS	High		
DISPENSE DRUG NOT SELECTED	High		
DUPLICATE DRUG CLASS ORDER	High		
DUPLICATE DRUG ORDER	High		
DUPLICATE ORDER	Moderate		
ERROR MESSAGE	Low		
ESTIMATED CREATININE CLEARANCE	Moderate		
GLUCOPHAGE-CONTRAST MEDIA	High		
LAB ORDER FREQ RESTRICTIONS	Moderate		
MISSING LAB TESTS FOR ANGIOGRA	High		
ORDER CHECKING NOT AVAILABLE	Low		
POLYPHARMCY	Moderate		
RECENT BARIUM STUDY	High		
RECENT ORAL CHOLECYSTOGRAM	High		
RENAL FUNCTIONS OVER AGE 65	Moderate		
SIGNIFICANT DRUG INTERACTION	Moderate		

These danger levels are based on rules supplied by a panel of physicians.

Danger level codes:

- 1 (High): Order check indicates a potentially high danger to the patient.
- 2 (Moderate): Order check indicates a moderate danger to the patient.
- 3 (Low): Order check indicates a low danger to the patient.

NOTE: High danger level order checks require entry of a reason if they are overridden. Moderate and low order checks can be overridden without entry of a reason.

Example: Changing the clinical danger level on an order check

```
Select CPRS Configuration Menu (Clin Coord)Option: OC Order Checking
Management Options
Select Order Checking Management Options Option: 2 Set Clinical Danger
Level for an Order Check
          Set Clinical Danger Level for an Order Check
may be set for the following:
    1 Division DIV [REGION 5]
    2 System
                     SYS [OEX.ISC-SLC.VA.GOV]
Enter selection: 1 Division REGION 5
----- Setting CLINICAL DANGER LEVEL for Division: REGION 5 -----
    Order Check
                                 Value
    CRITICAL DRUG INTERACTION
                                High
    DUPLICATE DRUG CLASS ORDER High
Select Order Check: ?
Answer with ORDER CHECKS NAME
Do you want the entire 20-Entry ORDER CHECKS List? Y (Yes)
Choose from:
  ALLERGY-CONTRAST MEDIA INTERAC
  ALLERGY-DRUG INTERACTION
  AMINOGLYCOSIDE ORDERED
  BIOCHEM ABNORMALITY FOR CONTRA
  CLOZAPINE APPROPRIATENESS
  CRITICAL DRUG INTERACTION
  CT & MRI PHYSICAL LIMITATIONS
  DUPLICATE DRUG CLASS ORDER
  DUPLICATE DRUG ORDER
  DUPLICATE ORDER
  ESTIMATED CREATININE CLEARANCE
  GLUCOPHAGE-CONTRAST MEDIA
  LAB ORDER FREQ RESTRICTIONS
  MISSING LAB TESTS FOR ANGIOGRA
  ORDER CHECKING NOT AVAILABLE
  PT & PTT FOR FRESH FROZEN PLAS
  RECENT BARIUM STUDY
  RECENT ORAL CHOLECYSTOGRAM
  RENAL FUNCTIONS OVER AGE 65
  SIGNIFICANT DRUG INTERACTION
    Order Check
                                  Value
    CRITICAL DRUG INTERACTION
                                High
    DUPLICATE DRUG CLASS ORDER
                               High
Select Order Check: DUPLICATE DRUG CLASS ORDER
Order Check: DUPLICATE DRUG CLASS ORDER Replace <Enter> DUPLICATE DRUG
CLASS ORDER
Value: High// Moderate Moderate
    Order Check
                                 Value
    CRITICAL DRUG INTERACTION
                                 High
    DUPLICATE DRUG CLASS ORDER
                                  Moderate
Select Order Check: <Enter>
```

CAT Scanner Height Limit

Enter the maximum height that the Computerized Axial Tomography (CAT) scanner can accommodate. This figure is then used in the built-in order check for patient height triggered whenever an order is submitted for a CAT scan procedure. The height is entered in whole inches.

Example: the maximum height for system is changed from 75 (6' 3") to 76 inches (6' 4").

CAT Scanner Weight Limit

Enter the maximum weight the CAT scanner can accommodate. This figure is then used in the built-in order check for patient weight triggered whenever an order is submitted for a CAT scan procedure. The weight is entered in whole pounds.

Example: the maximum weight for system is changed from 200 to 225 pounds.

```
Select Order Checking Management Options Option: 4 CAT Scanner Weight
Limit
TITLE = CAT Scanner Weight Limit
                     CAT Scanner Weight Limit
may be set for the following:
    1 Division DIV [REGION 5]
2 System SYS [OEX.ISC-S
                    SYS [OEX.ISC-SLC.VA.GOV]
Enter selection: 2 System OEX.ISC-SLC.VA.GOV
----- Setting for System: OEX.ISC-SLC.VA.GOV ------
 Value: 200// 225
                    225
may be set for the following:
    1
        Division
                    DIV
                            [REGION 5]
                     SYS
                            [OEX.ISC-SLC.VA.GOV]
        System
Enter selection: <Enter>
Select Order Checking Management Options Option: <Enter>
```

MRI Scanner Height Limit

Enter the maximum height that the Magnetic Resonance Imaging (MRI) scanner can accommodate. This figure is then used in the built-in order check for patient height triggered whenever an order is submitted for an MRI procedure. The height is entered in whole inches.

In the following example, the height limit for the scanner at division is changed from 6 feet 5 inches (77 inches) to 6 feet 3 inches:

```
Select Order Checking Management Option: 5 MRI Scanner Height Limit
TITLE = MRI Scanner Height Limit
                      MRI Scanner Height Limit
may be set for the following:
      Division DIV [REGION 5]
System SYS [OEX.ISC-SLC.VA.GOV]
    2 System
Enter selection: 1 Division REGION 5
------ Setting for Division: REGION 5 --------
 Value: 77// 75 75
may be set for the following:
       Division
                            [REGION 5]
       System
                     SYS
                            [OEX.ISC-SLC.VA.GOV]
Enter selection:<Enter>
```

MRI Scanner Weight Limit

This parameter is used by order checking to determine if a patient is too heavy to be examined in the MRI scanner. The value indicates the maximum weight (in pounds) allowed.

Example: the MRI weight limit for system is changed from 275 to 250 pounds:

Orderable Item Duplicate Order Range

Use this option to set the number of hours backwards in time to look for duplicate orders related to specific orderable items. The duplicate order range for lab and radiology procedures in general is set by the Lab Duplicate Order Range and Radiology Duplicate Order Range options.

Example:

```
Select Order Checking Mgmt Menu Option: 7 Orderable Item Duplicate Order
Range
TITLE = Orderable Item Duplicate Order Range
                     Orderable Item Duplicate Order Range
 may be set for the following:
                              [choose from HOSPITAL LOCATION]
     1 Location
                     LOC
     2 Service SRV [choose from SERVICE/SECTION]
3 Division DIV [REGION 5]
4 System SYS [OEX.ISC-SLC.VA.GOV]
Enter selection: 1 Location HOSPITAL LOCATION
Select HOSPITAL LOCATION NAME: CARDIOLOGY
                                                 RUSSELL, JOEL
------ Setting for Location: CARDIOLOGY -------
Select Instance: GASTROENTEROLOGY
Are you adding GASTROENTEROLOGY as a new Instance? Yes//<Enter>
                                                                    YES
Instance: GASTROENTEROLOGY// <Enter>
                                        GASTROENTEROLOGY GASTROENTEROLOGY
Value: ?
Enter the number of hours back in time you wish to check for duplicate
orders.
Value: 24
Select Instance: <Enter>
 may be set for the following:
                      LOC
                      SRV [choose from SERVICE/SECTION]
DIV [REGION 51
        Location
                               [choose from HOSPITAL LOCATION]
     1
        Service SRV
Division DIV
System SYS
     2
                              [OEX.ISC-SLC.VA.GOV]
Enter selection: <Enter>
```

Lab Duplicate Order Range

Use this option to set the number of hours backwards in time to look for duplicate lab orders. For example, a value of "24" indicates a lab procedure intended to be collected within 24 hours of the collection of the same lab procedure will trigger an order check indicating duplicate lab order.

NOTE: If the lab procedure has an entry in the option (parameter) ORK DUP ORDER RANGE OI, the OI parameter value takes precedence.

Example: the duplicate lab order range is changed from 24 hours to 48 hours for System:

In this example, all lab procedures except those with an entry in the Orderable Item Duplicate Order Range option will have a duplicate order range of 48 hours.

Radiology Duplicate Order Range

Use this option to set the number of hours backwards in time to look for duplicate radiology orders. For example, a value of "48" indicates a radiology procedure intended to be performed within 48 hours of the completion of the same radiology procedure will trigger an order check indicating duplicate radiology order.

NOTE: If the radiology procedure has an entry in the option (parameter) ORK DUP ORDER RANGE OI, the OI parameter value takes precedence.

Example: The duplicate radiology order range is changed from 48 hours to 24 hours for Division:

In this example, all radiology procedures except those with an entry in the Orderable Item Duplicate Order Range option will have a duplicate order range of 24 hours.

Enable or Disable Order Checking System

This option lets you determine if any order checking processing occurs in the entire Order Checking system.

E (Enabled): Indicates the Order Checking system is enabled and running.

D (Disabled): Indicates the Order Checking system is disabled and not running.

This parameter is set to Disabled in the exported version of Order Checking. IRMS can set this to Enabled as part of the implementation process.

Example: Order Checking is enabled on the Division level:

Enable or Disable Debug Message Logging

The Order Checking system can keep a log of special messages designed to assist in debugging Order Checking problems.

Example: Turning on Order Checking Debug Messages log

```
Select Order Checking Management Option: 11 Enable or Disable Debug Message
Logging
TITLE = Enable or Disable Logging Debug Messages
                 Enable or Disable Logging Debug Messages
may be set for the following:
       Division DIV [REGION 5]
System SYS [OEX.ISC-SLC.VA.GOV]
Enter selection: 2 System OEX.ISC-SLC.VA.GOV
------ Setting for System: OEX.ISC-SLC.VA.GOV -------
 Value: ?
Enter 'Enable/E' to log debug messages.
    Select one of the following:
                   Enable
         D
                  Disable
 Value: E Enable Enable
 may be set for the following:
       Division
                    DIV
                            [REGION 5]
    2 System
                    SYS
                            [OEX.ISC-SLC.VA.GOV]
Enter selection:
```

NOTE: The Log File takes a large amount of disk space when it is enabled. This option should be disabled again as soon as logging is no longer needed for debugging purposes.

Display the Order Checks a User Can Receive

This option displays a list of all Order Checks annotated with the status of each processing flag. The right hand column has an explanation for the processing flag status.

The processing flag can be set on one or more of five levels. The flag that is in effect is the one with the lowest entity precedence as given in the following list:

```
ENTITY PRECEDENCE: 1 ENTITY TYPE: User
ENTITY PRECEDENCE: 2 ENTITY TYPE: Location
ENTITY PRECEDENCE: 3 ENTITY TYPE: Service
ENTITY PRECEDENCE: 4 ENTITY TYPE: Division
ENTITY PRECEDENCE: 5 ENTITY TYPE: System
```

Example List:

```
Select Order Checking Management Option: 12 Display the Order Checks a User Can
Receive
Enter user's name: SNOW,CHARLES// <Enter>
                                                  CRS
Would you like help understanding the list of order checks? No// {\bf Y} (Yes)
DEVICE: HOME// <Enter> VAX
          Order Check List Help Message
                                                             Page:
The delivery of order checks is determined from values set for Users,
Inpatient Locations, Service/Sections, Hospital Divisions, Computer System and
OERR. Possible values include 'Enabled' and 'Disabled'. These values indicate
a User's, Location's, Service/Section's, Division's, System's and OERR's
desire for the order check to be 'Enabled' (displayed under most
circumstances) or 'Disabled' (normally not displayed.)
All values, except the OERR (Order Entry) value, can be set by IRM
or Clinical Coordinators. Individual users can set their 'Enabled/Disabled'
values for each specific order check via the 'Enable/Disable My Order Checks'
option under the Personal Preferences and Order Check Management for Users.
'ON' indicates the user will receive the order check under normal conditions.
'OFF' indicates the user normally will not receive the order check.
Order check recipient determination can also be influenced by patient
location (inpatients only.) This list does not consider patient location
when calculating the ON/OFF value for an order check because a patient is
not known when the option is selected.
Press RETURN to continue or '^' to exit:
             Order Check List Help Message
                                                              Page:
           - End of Report -
Press RETURN to continue: <Enter>
This will take a moment or two, please stand by.....
DEVICE: HOME// <Enter>
                         VAX
```

Display the Order Checks a User Can Receive, cont'd

Order Check List	for (GREEN, JOANN Page: 1
Order Check	ON/	OFF For This User and Why
ALLERGY-CONTRAST MEDIA INTERAC	ON	OERR value is Enabled
ALLERGY-DRUG INTERACTION	ON	User's service MEDICINE value is Enabled
AMINOGLYCOSIDE ORDERED	OFF	Division value is Disabled
BIOCHEM ABNORMALITY FOR CONTRA	ON	OERR value is Enabled
CLOZAPINE APPROPRIATENESS	ON	OERR value is Enabled
CRITICAL DRUG INTERACTION		User value is Enabled
CT & MRI PHYSICAL LIMITATIONS	OFF	User's service MEDICINE value is Disabled
DISPENSE DRUG NOT SELECTED	ON	OERR value is Enabled
DUPLICATE DRUG CLASS ORDER	ON	OERR value is Enabled
DUPLICATE DRUG ORDER	ON	User value is Enabled
DUPLICATE ORDER	ON	System value is Enabled
ERROR MESSAGE	ON	OERR value is Enabled
ESTIMATED CREATININE CLEARANCE	ON	OERR value is Enabled
GLUCOPHAGE-CONTRAST MEDIA	ON	Division value is Enabled
GLUCOPHAGE-LAB RESULTS	ON	OERR is Enabled
LAB ORDER FREQ RESTRICTIONS	OFF	Division value is Disabled
MISSING LAB TESTS FOR ANGIOGRA		OERR value is Enabled
ORDER CHECKING NOT AVAILABLE	ON	OERR value is Enabled
POLYPHARMACY	ON	OERR value is Enabled
RECENT BARIUM STUDY	ON	OERR value is Enabled
RECENT ORAL CHOLECYSTOGRAM		OERR value is Enabled
RENAL FUNCTIONS OVER AGE 65	ON	OERR value is Enabled
SIGNIFICANT DRUG INTERACTION	ON	User value is Enabled
- End of Report -		
Press RETURN to continue:		

Edit Site Local Terms

After CPRS installation, each site must run this option to link terms used in the expert system to local terms. Some terms like DNR and NPO diet must be mapped to one or more entries in the orderable item file. Other terms like Serum Creatinine must be mapped to the lab test file. See the Notifications section in this manual for a description of this option.

Nat'l Expert System Term	Linked File	Order Check
SERUM CREATININE	LAB [60]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65
SERUM UREA NITROGEN	LAB [60]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65
ANGIOGRAM,CATH – PERIPHERA	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
PROTHROMBIN TIME	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
THROMBOPLASTIN TIME PARTIA	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
WHITE BLOOD COUNT (WBC)	LAB [60]	CLOZAPINE APPROPRIATENESS
BLOOD SPECIMEN	TOPOG [61]	CLOZAPINE APPROPRIATENESS
SERUM SPECIMEN	TOPOG [61]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65

8. Menu Management

a. CPRS Menu Assignment

We recommend that you assign menus as follows:

Menu Text	Option Name	Assignment
CPRS Manager Menu	ORMGR MENU	IRMS specialists assigned to CPRS
Clinician Menu	OR MAIN MENU	Clinicians (physicians, psychologists,
	CLINICIAN	social workers, nurse practitioners,
		PAs, etc.)
Nurse Menu	OR MAIN MENU NURSE	Nurses
Ward Clerk Menu	OR MAIN MENU WARD	Ward Clerks, MAS personnel
	CLERK	
CPRS Configuration Menu	ORCL MENU	Clinical Coordinators, ADPACS,
(Clin Coord)		
CPRS Configuration Menu	ORE MGR	IRMS CPRS specialist
(IRM)		(locked with XUPROG key)

Clinician, Nurse, or Ward Clerk Menus

These menus all contain the same options, but available actions are defined by keys and the assignment of a primary add order menu. These are also the same options available with OE/RR 2.5, but they function somewhat differently in CPRS.

Abbr	Menu text	Name	Description
RO	Act On Existing	OR REVIEW	This option takes you to the patient
	Orders	ORDERS	selection screen.
AD	Add New Orders	OR ADD MENU	This option takes you to the patient
		CLINICIAN	selection screen,
OE	CPRS Clinician Menu	OR OE/RR MENU	This is the main option for accessing the
		CLINICIAN	patient chart.
PP	Personal Preferences	ORPO MENU	This menu allows users to select their
			personal preferences in options and
			formats used in CPRS.
RR	Results Reporting	OR RESULTS	This action type option sets up and calls
	Menu	REPORTING	MAIN^ORSDVR to allow selection of
			multiple patients, followed by multiple
			reports. It then asks any parameters
			associated with the selected reports and
			gets a device to which the reports will be
			printed by patient.

CPRS Configuration Menu [OR PARAM COORDINATOR MENU]

This menu is intended for Clinical Application Coordinators. It contains options for setting up and managing CPRS options and parameters.

Menu Text	Option name	Description	
Allocate OE/RR	ORCL KEY	This option lets Clinical Coordinators allocate security	
Security Keys	ALLOCATION	keys to CPRS clinicians, nurses, or ward clerks.	
Check for Multiple	OR PARAM	This menu, for IRMS and coordinators, lets you set	
Keys	SYSTEM	various parameters, including order checking and	
		notification parameters. It also lets you allocate security	
		keys.	
Edit DC Reasons	ORCL ORDER	This option allows access to the Order Reason file to	
	REASON	enter or edit reasons for discontinuing an order.	
GUI Parameters	ORW PARAM GUI	Configuration parameters for the CPRS GUI.	
Miscellaneous	OR PARAM ORDER	This option is for editing miscellaneous hospital wide	
Parameters	MISC	CPRS parameters, such as active orders time range, grace	
		days before purge, whether to automatically unflag	
		orders, confirm providers, review on patient movement,	
		etc.	
Notification Mgmt	ORB NOT COORD	This menu is used by clinical coordinators and IRM staff	
Menu	MENU	to turn notifications on or off for a provider. It prompts	
		the coordinator for the user, then calls other notification	
		mgmt options. It also contains options that can purge	
0.1.01.11	ODY ODDED GVV	existing notifications.	
Order Checking	ORK ORDER CHK	Options on this menu allow IRMS to set order checking	
Management	MGMT MENU	parameters for each of the possible entities: System,	
		Division, Service, Location, Team, Class, or User, as	
0.1	ODCMACNT	applicable.	
Order Menu	ORCM MGMT	Options on this menu let you enter or edit orderable	
Management		items, prompts, generic orders, quick orders, order sets, and order menus. It also lets you convert protocols.	
Datiant List Mamt	ORLP PATIENT	This menu allows coordinators and IRMS to create and	
Patient List Mgmt Menu	LIST MGMT MENU		
Meliu	LIST MONT MENU	manage personal and patient team lists and to set default patient list parameters.	
Print/Report	OR PARAM	This menu is for editing print parameters. It should be	
Parameters	PRINTS	available to the clinical coordinator and IRM Staff.	
Print Formats	ORCL PRINT	This option allows the user to define formats for printing	
1 mit i omats	FORMAT	labels and requisitions for orders.	
Release/Cancel	ORC DELAYED	This option allows clinical coordinators to release or	
Delayed Orders	ORDERS	cancel orders that have been put on delay, but then	
Delayed Orders	ORDLING	weren't ever released for some reason.	
	l	words to tor released for some reason.	

CPRS Configuration (IRM) [OR PARAM IRM MENU]

As the name implies, this menu is intended primarily for IRMS specialists who will be maintaining and troubleshooting the more technical aspects of CPRS.

Option	Menu Text	Description
OCX MAIN	Order Check Expert System Main Menu	These options are used for troubleshooting Order Checking and Notifications, for compiling the expert system rules, and for linking local terms with national terms for order checking.
ORMTIME MAIN	ORMTIME Main Menu	These options are intended for IRMS only, and are used in conjunction with the ORTASK routines.
ORE MGR	CPRS Clean-up Utilities	This menu contains an option that checks consistency between lab files and OE/RR files.
XPAR MENU TOOLS	General Parameter Tools	This menu contains general-purpose tools for managing parameters.

b. Order Menu Management

This menu is exported with Patch 49, and is also on the CPRS Configuration Menu (Clin Coord), on the CPRS Manager Menu.

If your site used OE/RR 2.5, most of your menus, quick orders, and generic orders are converted to CPRS when it's installed. Order Menu Management options can help you convert protocols that weren't automatically converted, edit or create quick orders and generic orders, create order sets, and assign primary order menus.

If your site hasn't used OE/RR 2.5, you can use options on the Order Menu Management menu (distributed with the pre-installation patch, OR*2.5*49, or on the CPRS Configuration Menu when CPRS is installed) to begin creating menus, quick orders, and parameters.

If your site hasn't used OE/RR 2.5, you must create and assign primary order menus for all of your users.

ia ardar itams	
ic order items.	
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Orderable Items

Orderable items correspond to those services or products that may be requested and provided by the patient care services. They can be things such as a lab test, an imaging procedure, or a medication. The ORDERABLE ITEM file (#101.43) contains the orderable items for each service. CPRS uses orderable items to identify the specific thing that has been ordered. Each package that interfaces with CPRS provides a mechanism to update or add to the orderable items belonging to the package.

Generic Orders

Nursing and Activity orders, often referred to as *generic orders*, have no defined specifications for the required prompts or the format of the order text. The option *Enter/edit orderable items* [ORCM ORDERABLES] lets you add new entries of the nursing care or activity types.

Generic orders are comprised of:

1. Orderable Item

Defines the exact service or product being requested. This is easy to define for ancillary service orders in the hospital such as radiology or pharmacy, but for generic orders, the Clinical Coordinator or IRMS defines and creates the orderable items.

2. Prompts

Prompts ask information about the order being placed.

3. Start and stop dates

To create a generic order, we recommend that you first write the text of the order, as you would like it to read. Then you can construct a generic order that will put the text together to read as you have written it.

Naming Conventions

We recommend that you select naming conventions for the orderable items, prompts, and generic orders that you create using the Order Menu Management options. Advantages:

- Allows similar types of order dialogs to be grouped together by name so that the type is apparent
- Allows those managing the order dialogs to find a specific order dialog more quickly because the names are organized by type

All applications interfacing with CPRS use consistent naming conventions to easily identify those order dialogs that belong with that application.

Suggested naming conventions:

ORZ GTX prompt type

ORZ dialog type (generic orders)

ORZ ADD MENU add order menus

08/21/00

Enter/Edit Orderable Items

This option lets you enter new generic orderable items to be placed on CPRS Add Orders menus, or to edit existing generic orderable items (e.g., change their names to ones more meaningful to your users).

1. Select Enter/edit orderable items from the Order Menu Management menu.

```
Select Option: Order Menu Management Option
         Enter/edit orderable items
   PM
         Enter/edit prompts
   GO
        Enter/edit generic orders
   QO
        Enter/edit quick orders
        Enter/edit order sets
   ST
   AC
         Enter/edit actions
   MN
         Enter/edit order menus
   ΑO
        Assign Primary Order Menu
   CP
        Convert protocols
   SR
        Search/replace components
   LM
         List Primary Order Menu
You have PENDING ALERTS
         Enter "VA VIEW ALERTS
                                      to review alerts
Select Order Menu Management Option: OI Enter/edit orderable items
```

- 2. Enter the Type of orderable item, Activity or Nursing that you wish to add or edit.
- **3.** Enter the orderable item for the type you chose. If you enter two question marks, a list of generic orders for your site is displayed. Select the orderable item you wish to edit, or enter a new orderable item.

Activity order

```
Type of Orderable: ?
Answer with DISPLAY GROUP NAME
Do you want the entire DISPLAY GROUP List? Y (Yes)
Choose from:
   ACTIVITY
  NURSING
Type of Orderable: Activity
Select ORDERABLE ITEMS: ?
Answer with ORDERABLE ITEMS
Do you want the entire ORDERABLE ITEMS List? Y (Yes)
Choose from:
   AIR MATTRESS
   ARTERIAL LINE
   ARTERIAL SHEATH
     You may enter a new ORDERABLE ITEMS, if you wish
     Answer must be 3-63 characters in length.
Select ORDERABLE ITEMS: JUNK FOOD
 Are you adding 'JUNK FOOD' as a new ORDERABLE ITEMS (the 3364TH)? No//
Y (Yes)
```

Enter/edit Prompts

Prompts are the second component of the order dialog that makes up a generic order dialog. This type of order dialog corresponds to the *term type* protocol in OE/RR 2.5. However, rather than using VA FileMan to create the prompt, you can now use this option.

This option lets you add or edit prompts of the following types:

- D date/time
- R relative date/time
- F free text
- N numeric
- S set of codes
- P pointer to a file
- Y yes/no
- W word processing

Date/Time Example

Free Text Example

```
Select Order Menu Management Option: Enter/edit prompts
Select PROMPT: Free Text ORZ GTX FREE TEXT JG
Are you adding 'ORZ GTX FREE TEXT JG' as
a new ORDER DIALOG? No// y YES
NAME: ORZ GTX FREE TEXT JG Replace <Enter>
TEXT OF PROMPT: Special Instructions: Replace
TYPE OF PROMPT: free text//
DESCRIPTION:
No existing text
Edit? NO// <Enter>
Min/max length
```

Numeric Example

```
Select Order Menu Management Option: Enter/edit prompts
Select PROMPT: start date/time ORZ NUMBER 1-24
Are you adding 'ORZ NUMBER 1-24' as
    a new ORDER DIALOG? No// y YES
TEXT OF PROMPT: Number of hours:
TYPE OF PROMPT: numeric
INCLUSIVE LOWER BOUND: 1// <Enter>
INCLUSIVE UPPER BOUND: 24// <Enter>
MAXIMUM NUMBER OF FRACTIONAL DIGITS: 1// <Enter>
DESCRIPTION:
No existing text
Edit? NO// <Enter>
```

Set of Codes Example

```
Select Order Menu Management Option: Enter/edit prompts
Select PROMPT: DAY OF WEEK ORZ DAY OF WEEK
Are you adding 'ORZ DAY OF WEEK' as
    a new ORDER DIALOG? No// y YES
TEXT OF PROMPT: DAY OF WEEK
TYPE OF PROMPT: set of codes
INTERNALLY-STORED CODE: M// WILL STAND FOR: Monday// <Enter>
INTERNALLY-STORED CODE: T// WILL STAND FOR: Tuesday//<Enter>
INTERNALLY-STORED CODE: W// WILL STAND FOR: Wednesday//<Enter>
INTERNALLY-STORED CODE: TH// WILL STAND FOR: Thursday//<Enter>
INTERNALLY-STORED CODE: TH// WILL STAND FOR: Thursday//<Enter>
INTERNALLY-STORED CODE: F// WILL STAND FOR: Friday//<Enter>
This prompt will ask for a selection from the local treatment group file.
Edit? NO//<Enter>
```

Pointer Example

```
Select Order Menu Management Option: Enter/edit prompts
Select PROMPT: location: ORZ GTX LOCATION
TEXT OF PROMPT: Location: //<Enter>
TYPE OF PROMPT: pointer to a file//<Enter>
POINT TO WHICH FILE: HOSPITAL LOCATION//<Enter>
DESCRIPTION:
1>The ward the patient is in or the clinic he is visiting.
2><Enter>
EDIT Option:<Enter>
```

Yes/No Example

```
Select Order Menu Management Option: Enter/edit prompts
Select PROMPT: ORZ GTX YES/NO
Are you adding 'ORZ GTX YES/NO' as
    a new ORDER DIALOG? No// y YES
TEXT OF PROMPT: YES/NO PROMPT//<Enter>
TYPE OF PROMPT: yes/no//<Enter>
DESCRIPTION:
    No existing text
    Edit? NO// <Enter>
```

Word-processing Example

```
Select Order Menu Management Option: Enter/edit prompts
Select PROMPT: WORD-PROCESSING: ORZ GTX WORD-PROCESSING JG
Are you adding 'ORZ GTX WORD-PROCESSING JG' as
a new ORDER DIALOG? No// y YES
TEXT OF PROMPT: Comment: //<Enter>
TYPE OF PROMPT: word processing//<Enter>
DESCRIPTION:
No existing text
Edit? NO// <Enter>
```

Enter/edit Generic Orders

Generic order dialogs in CPRS serve the same function as generic text orders in OE/RR v 2.5. They define a patient's activities or document instructions to nursing or ward staff for the care of the patient. Text order protocols used in OE/RR are converted to the ORDER DIALOG (#101.41) file and can now be used in CPRS.

The process for creating new generic order dialogs in CPRS is quite different from the process used in the previous version. All generic order dialogs are created or modified using this option. When you create a new generic order dialog, you will be given the choice of copying an existing order dialog. A good guideline for creating most new generic order dialogs would be to copy the existing order dialog OR GXMISC GENERAL. This order dialog has the four basic prompts that make up a generic order: an orderable item, at least one comment-type prompt, a start date, and a stop date.

The following sequence shows:

- The process of creating a new generic order dialog that will assign the patient to a specific counseling group, ask the approximate date of the traumatic event, ask which days the group will meet, and ask whether the patient's family should participate.
- The prompts as they would be asked during an ordering session
- The help text for each prompt that the user is required to answer
- The appearance of the order once it becomes part of the patient record.
- 1. Select *Enter/edit generic orders* from the Order Menu Management menu.

```
ОТ
          Enter/edit orderable items
  PM
         Enter/edit prompts
         Enter/edit generic orders
  QΟ
         Enter/edit quick orders
  ST
         Enter/edit order sets
         Enter/edit actions
         Enter/edit order menus
  MN
  ΑO
         Assign Primary Order Menu
  CP
         Convert protocols
  SR
         Search/replace components
         List Primary Order Menu
  T.M
Select Order Menu Management Option: GO Enter/edit generic orders
```

- **2.** Enter the generic order name. You can choose from the list of generic orders used at your site, or enter a new one.
- NOTE: The shaded fields in the example are only available to programmers with the @ as their Filemanager access code.

Creating or editing a generic order, cont'd

```
Select Order Menu Management Option: GO
                                         Enter/Edit generic orders
Select ORDER DIALOG NAME: ORZ PATIENT COUNSELING
Are you adding 'ORZ PATIENT COUNSELING' as a new ORDER DIALOG? No// Y
(Yes)
   ORDER DIALOG DISPLAY GROUP: ??
   This field determines what display group this dialog has been defined
for. It will define which orderable items are selectable with this dialog,
as well as what service to send the order to when it is complete.
Choose from:
   ACTIVITY
   ALL SERVICES
   ALLERGIES
   ANATOMIC PATHOLOGY
   ORDER DIALOG DISPLAY GROUP: NURS NURSING
   ORDERABLE ITEM: ??
Choose from:
   AIR MATTRESS
                 Air Mattress
   ARTERIAL LINE Arterial Line
   ARTERIAL SHEATH Arterial Sheath
   CALL HO ON
               Call HO on
Do you wish to copy an existing order dialog? YES// <Enter>
Select ORDER DIALOG TO COPY: OR GXMISC GENERAL
Copying ...
NAME: ORZ PATIENT COUNSELING Replace <Enter>
DISPLAY TEXT: ??
     The text of this dialog's name as it appears on a menu or subheader.
DISPLAY TEXT: Patient Counseling
SIGNATURE REQUIRED: ??
     This field indicates what signature will be required for orders
created by this dialog, to be considered complete and ready to release to
the service for action. If this flag is set to NO and the dialog contains a
prompt for item(s) from the Orderable Item file, the order created may
still require a signature if any of the items ordered are individually
flagged as requiring a signature.
     Choose from:
       0
                NONE
       1
                ORELSE
       2
                ORES
SIGNATURE REQUIRED: ORELSE
VERIFY ORDER: ??
     This field is a flag, which determines if the order created by this
dialog will be presented to the user for verification before saving in the
```

Orders file; for most quick orders, this flag should be set to 0 (no).

This is the point

takes place.

at which the copy

```
Choose from:
                       1
                       0
                                NO
               VERIFY ORDER: YES
               ASK FOR ANOTHER ORDER: NO// ??
                     This field allows the user to add another order from this dialog,
               when the initial order is accepted and placed; if set to YES, the user
               will be asked "Add another <dialog display text> order?" to allow for
               either exiting the processor or adding an additional order of the same
               type. This field can also be set to YES-DON'T ASK to force the processor
               to automatically drop into prompting for another order without asking
               first.
                     Choose from:
                       0
                                NO
                       1
                                YES
                                YES-DON'T ASK
               ASK FOR ANOTHER ORDER: NO// <Enter>
               DESCRIPTION:
               This dialog will allow assignment of patient to a counseling group.
                 Edit? NO//
               ENTRY ACTION:
               EXIT ACTION:
               VALIDATION: ??
                     This is MUMPS code that will be executed at the time of releasing an
               order created with this dialog; dialog responses may be checked again
               here before releasing the order To the service.
               VALIDATION:
               ADDITIONAL TEXT: ??
                     This is MUMPS code that will be executed when order ORIFN created by
               this dialog is about to be displayed; any string that should be appended
               to the order text should be returned in Y.
               ADDITIONAL TEXT:
               Select PROMPT: 1
                                       ORZ GTX COUNSELING GROUP
Determines the
               SEOUENCE: 1//
prompting
               PROMPT: ORZ GTX COUNSELING GROUP
                                                             pointer to a file
               INDEX: ??
sequence.
                   For pointer-type prompts, this is the index to use when searching the
               file; it must be in the form of a regular cross-reference. To search on
               multiple indices, enter a string of index names separated by semi-colons,
               i.e. "B;C"
               INDEX: <Enter>
Only seen with
               SCREEN: ??
pointer-type
                     For pointer-type prompts, this field may contain MUMPS code that will
prompts.
               be set into DIC("S") to screen the possible choices in the pointed-to
               file.
               SCREEN:
Only seen with
               SPECIAL LOOKUP ROUTINE: ??
pointer-type
                     This field contains a routine to execute that will replace the
prompts.
               standard DIC lookup for this prompt; it must be entered here as
               LINETAG; ROUTINE using a ; instead of ^ and where LINETAG is optional.
This text will be
               SPECIAL LOOKUP ROUTINE:
               DISPLAY TEXT: ??
question asked of
                     This field allows the text that normally appears for this item to
users.
                     be replaced with alternate text for use in this dialog or menu.
               DISPLAY TEXT: Choose group:
               REQUIRED: ??
                     This field indicates that the user must enter a response to this
                     prompt.
                     Choose from:
                       1
                                YES
                       0
                                NO
               REQUIRED: YES
```

```
MULTIPLE VALUED: ??
     This field determines if this prompt will be allowed to have multiple
     values, or be prompted for only once; if this prompt is a sub-dialog,
     the entire dialog will be asked once or many times, as a group.
     Choose from:
       1
       0
                NO
MULTIPLE VALUED: N NO
ASK ON EDIT ONLY: ??
     This field determines the behavior of the dialog driver for this
prompt; if no value or the defined default is usually correct for this
prompt, enter YES here to have this prompt skipped on the first pass
through this dialog when creating an order.
     Choose from:
       1
                 YES
       0
                 NO
ASK ON EDIT ONLY: <Enter>
ASK ON ACTION: ??
    This field determines the behavior of the dialog driver for this
prompt when taking a particular action on an order created by this dialog.
If this string contains "R", this prompt will be asked when renewing an
order if this string contains "C", this prompt will be asked when changing an order; if this string contains "W", this prompt will be asked when
rewriting an order.
ASK ON ACTION: <Enter>
HELP MESSAGE: ??
     This field contains the help message to be presented when the user
enters a question mark at this prompt.
HELP MESSAGE: Choose the event corresponding to the need for counseling.
           Replace
XECUTABLE HELP: ??
     This is code that is to be executed when the user enters two or more
question marks at this prompt.
XECUTABLE HELP:
ASK ON CONDITION: ??
    This is MUMPS code that sets $T to determine if prompt should be asked
or simply given a default value and presented to the user for acceptance
or editing. For example, the prompt "Pregnant: " may have code here to
check the sex of the current patient, i.e. I ORSEX="F" will allow it to
be asked for female patients.
ASK ON CONDITION:
INPUT TRANSFORM: ??
    This is code that will be used as the third piece of DIR(0) when
asking this prompt.
INPUT TRANSFORM:
DEFAULT: ??
  Choose from:
   DEPRESSION
   FAMILY COUNSELING
   FAMILY LOSS
   NEW PROSTHESIS
   PTSD
   UNEMPLOYMENT
DEFAULT: <Enter>
VALIDATION: ??
     This is code that will be executed after a response is entered to
this prompt; if this prompt should be re-asked, kill the variable DONE.
If execution of the ordering dialog should be stopped, set ORQUIT=1.
```

VALIDATION:

If there's no entry-

here, the prompt

will only be asked

on the screen if it

VALIDATION

Code will cause

the prompt to

assume the

default.

fails

logic.

```
ORDER TEXT SEQUENCE: ??
                        This field indicates the order in which values will be concatenated
                        together to build the order text; this may differ from the prompting
                        sequence defined in the .01 Position field.
                   ORDER TEXT SEQUENCE: 1
                   FORMAT: ??
                        This is a string of characters that will define any exceptions to how
 Useful for
                        the external form of this value is generated. Possible values
 formatting the
                        include:
                          Pointer
                                           -> Field number (default = .01)
                          Set of Codes
                                           -> 1 to return code instead of name
 especially dates
                          Date/Time
                                           -> Format string to pass $$FMTE^XLFDT (default = 2)
 and pointers.
                          Suppress value
                                          -> @
                          Replace value
                                           -> @<ptr> where ptr is the Dialog IEN of the prompt
                                               whose value, when present, supersedes this
                                               value
                          Required value -> *<ptr> where ptr is the Dialog IEN of the prompt
If the response
                                               whose value is required to be present to
                                                include this value
matches the entry
                   FORMAT:
here, any text and
                   OMIT TEXT: ??
the response will
                    This is the external form of a value that is not to be included when
be excluded.
                   building the order text. E.g. to include the urgency in the order text
                   unless it is routine, enter "ROUTINE" here.
                   OMIT TEXT: <Enter>
                   LEADING TEXT: ??
                        This field contains text that will be appended to the order text
Leading and
                        immediately in front of this value, e.g. "Instructions:." If this text
trailing text can _
                   is contained in a variable, enter @NAME where NAME is the variable name
be up to 80
                   LEADING TEXT: Assign patient to:
                   TRAILING TEXT: ??
                        This field contains text that will be appended to the order text
                        immediately following this value, e.g. "refills." If this text is
                        contained in a variable, enter @NAME where NAME is the variable name
                   TRAILING TEXT: group
                   Select PROMPT: 2
                   SEOUENCE: 2//
                   PROMPT: ORZ GTX DATE OF EVENT
                                                                date/time
                   DISPLAY TEXT: Date of event:
                   REQUIRED: NO// <Enter>
                   MULTIPLE VALUED: NO// <Enter>
                   ASK ON EDIT ONLY: <Enter>
                   ORDER TEXT SEQUENCE: 2
                   FORMAT:
                   OMIT TEXT: <Enter>
                   LEADING TEXT: following event on/about
                   TRAILING TEXT: < Enter>
                   Select PROMPT: 3
                   SEQUENCE: 3// <Enter>
                   PROMPT: ORZ GTX DAY OF WEEK
                                                            set of codes
                   DISPLAY TEXT: Day group meets:
                   REQUIRED: NO// <Enter>
                   MULTIPLE VALUED: Y YES
                   MAX NUMBER OF MULTIPLES: ??
                        This is the maximum number of values that may be entered for this
                   prompt, if it is flagged as being multiple-valued. For example, a diet order may have up to 5 diet modifications entered, where 5 is the maximum
                   allowed that would be entered here.
                   MAX NUMBER OF MULTIPLES: 3
```

answer,

characters.

```
TITLE : ??
     This is text that will be used in place of the prompt when the order is
displayed for place, edit, or cancel, or at the top of a multiple-valued
prompt. The Display Text for the prompt will be used together with the
instance number to prompt for user input; for example if Title="Lab Tests:"
and Display Text="Test:" the user would see
       Lab Tests:
       1. Test:
       2. Test:
TITLE: Meeting Dates:
ORDER TEXT SEQUENCE: 3
FORMAT:
OMIT TEXT: <Enter>
LEADING TEXT: Group meets
TRAILING TEXT: .
Select PROMPT: 4
SEQUENCE: 4// <Enter>
PROMPT: ORZ GTX YES/NO
                                  yes/no
DISPLAY TEXT: Family participation:
REQUIRED: NO// YES
MULTIPLE VALUED: <Enter>
ORDER TEXT SEQUENCE: 4
FORMAT:
OMIT TEXT: YES
LEADING TEXT: <Enter>
TRAILING TEXT: family participation.
Select PROMPT: 5
SEQUENCE: 5// <Enter>
PROMPT: ORZ GTX WP
DISPLAY TEXT: Comments:
REOUIRED: <Enter>
MULTIPLE VALUED: <Enter>
ASK ON EDIT ONLY: YES
ASK ON ACTION: <Enter>
HELP MESSAGE: <Enter>
XECUTABLE HELP:
ASK ON CONDITION:
INPUT TRANSFORM:
DEFAULT WORD-PROCESSING TEXT:
  No existing text
 Edit? NO// <Enter>
VALIDATION:
ORDER TEXT SEQUENCE: 5
FORMAT:
OMIT TEXT: <Enter>
LEADING TEXT: <Enter>
TRAILING TEXT: < Enter>
                      OR GTX START DATE/TIME
Select PROMPT: 6
SEOUENCE: 6//
PROMPT: OR GTX START DATE/TIME//
                                            relative date/time
DISPLAY TEXT: Start date:
```

This field is only asked for wordprocessing prompts.

REQUIRED: NO// YES

```
MULTIPLE VALUED: <Enter>
                 DEFAULT: "NOW"// <Enter>
                 VALIDATION:
                 ORDER TEXT SEQUENCE: <Enter>
                 FORMAT:
                 OMIT TEXT: <Enter>
                 LEADING TEXT: <Enter>
                 TRAILING TEXT: <Enter>
                 Select PROMPT: 7
                                         OR GTX STOP DATE/TIME
                 SEQUENCE: 7// <Enter>
                 PROMPT: OR GTX STOP DATE/TIME// <Enter>
                                                                     relative date/time
                 DISPLAY TEXT: Stop date:
                 REQUIRED: NO// <Enter>
                 MULTIPLE VALUED: <Enter>
This code will
assure that the
                 DEFAULT: <Enter>
stop date is valid
                 VALIDATION: I $$FTDCOMP^ORCD("START DATE/TIME", "STOP DATE/TIME", ">") K DONE
with the start
                 W $C(7),!," Cannot end before start date/time!",! Replace
                 ORDER TEXT SEQUENCE: <Enter>
date.
                 FORMAT:
                 OMIT TEXT: <Enter>
                 LEADING TEXT: <Enter>
                 TRAILING TEXT: <Enter>
```

Ordering this Generic order from an Add Order Menu

```
Select Item(s): Next Screen// Patient Counseling
                                              -- Patient Counseling --
                  Choose group: PTSD
                  Date of event: 1991 (1991)
                  Day group meets: Wednesday
                  Another Day group meets: Friday
                  Another Day group meets: <Enter>
                  Family participation: NO
                  Start date: NOW// <Enter>
                  Stop date: T+60 (NOV 01, 1997)
This verification
box will only be
presented to the
                                 Orderable Item: PATIENT COUNSELING
user when the
                                   Choose group: PTSD
VERIFY
                                  Date of event: 1991
                                  Meeting Dates: Wednesday
ORDER FIELD
                                                 Friday
IS SET to yes.
                           Family participation: NO
                                    Start date: NOW (9/2/97@13:10)
                                     Stop date: T+60 (11/1/97)
                   (P)lace, (E)dit, or (C)ancel this order? PLACE// <Enter>
                        ... order placed.
```

This dialog will create an order with the order text as follows on the next page, depending on the answer to the question regarding family participation.

Order text created when answering NO to the family participation question:

>> Assign patient to PTSD group following event on/about 1991 . Group meets Wednesday, Friday . NO family participation.

Order text created when answering YES to the family participation question:

>> Assign patient to PTSD group following event on/about 1991 . Group meets Wednesday, Friday

General Information

- 1) The use of an orderable item in each generic order is advised, as it will allow ordering statistics to be gathered. The orderable item is stored in the ORDER (#100) file and cross referenced to facilitate gathering of such statistics
- 2) Spaces are not required at the beginning or end of the leading or trailing text, the dialog driver will insert them.
- 3) Generic orders may use a start date and stop date. There are existing prompts that are a start date (OR GTX START DATE), stop date (OR GTX STOP DATE), start date/time (OR GTX START DATE/TIME) and stop date/time (OR GTX STOP DATE/TIME). We recommend that you use the existing prompts, as they already contain validation code to ensure proper date and/or time input. Defaults may also be entered for the start date or stop date on each generic order dialog.
- 4) **NOTE**: No changes are saved until PLACE is selected.

Enter/Edit Quick Orders

Quick orders in CPRS have the same functionality as they did in OE/RR V. 2.5—they speed up the ordering process by predefining many of the answers that a user would normally have to type in while placing orders.

The process for creating quick orders has been standardized with this option. In OE/RR v 2.5, quick orders for Radiology, Inpatient Medications, Vitals, and Consults were created using an option in those packages. Lab and Dietetics quick orders required programmer level access. With CPRS, quick orders for all packages are created and edited using this option; no special VA FileManager access is required.

The dialog presented while creating quick orders varies, depending on the package associated with the quick order. The dialog is very similar to what is seen while actually placing an order for that package. In addition, you may indicate for each quick order if the ordering person will be allowed/should be required to review and verify the order before accepting.

A major advantage in CPRS is that quick orders can be edited. As was the recommendation in OE/RR v 2.5, the creation of quick orders for any package should be done in coordination with the application coordinator for that service. It is also a good practice to create quick orders based on real need instead of anticipated need. Once created, the quick orders can be placed on any appropriate order menu.

Namespacing

Quick Orders should follow a consistent naming convention. Starting each quick order name with a consistent set of letters will make the quick orders easy to identify, easy to organize, and prevent creation of duplicates.

Recommended Guidelines for naming quick orders:

- 1. Append a Z to the end of the exported namespace for each package
- 2. Make the name of the quick order as descriptive as possible. The name of the quick order should contain the name of the orderable item and should include reference to as many of the defined prompts as possible (e.g., RAZ CHEST 2 VIEWS STAT PORTABLE).
- 3. Quick Order names should be unique within the first 30 characters.

Exported package namespaces

•	Consult/Request Tracking		GMRC
•	Dietetics		FH
•	IV Medications		PSJI
•	Laboratory		LR
•	Radiology/Nuclear Medicine		RA
•	Outpatient Medications	PSO	
•	Unit Dose Medications	PSJ	
•	Vital Measurements		GMRV

Protocol conversion of quick orders

Most of the protocols that aren't converted with the installation of this pre-release package are quick orders that have been created locally with entry and exit action code. This option lets you recreate them, or complete those quick orders that didn't fully convert.

1. Select *Enter/edit quick orders* from the Order Menu Management menu.

```
Select Option: Order Menu Management
         Enter/edit orderable items
         Enter/edit prompts
  GO
        Enter/edit generic orders
        Enter/edit quick orders
  ST
        Enter/edit order sets
         Enter/edit actions
  AC
  MN
         Enter/edit order menus
  CP
         Convert protocols
         Search/replace components
  T.M
         List Primary Order Menu
You have PENDING ALERTS
         Enter "VA
                     VIEW ALERTS
                                      to review alerts
Select Order Menu Management Option: QO Enter/edit quick orders
```

2. Enter the order dialog name. You can choose from a list of quick orders used at your site, or create a new one.

```
Select OUICK ORDER DIALOG NAME: ??
Choose from:
   FHWN1
   FHWN2
   GMRVORADMIT V/M
   GMRVORB/P
   GMRVORHT
   GMRVORPULSE
   GMRVORRESP
   GMRVORTEMP
   GMRVORTPR
   GMRVORTPR B/P
   GMRVORWT
   OR GXACTV AD LIB
   OR GXACTV AMBULATE
   OR GXACTV AMBULATE TID
   OR GXACTV BATHROOM PRIVILEGES
   OR GXACTV BED REST
   OR GXACTV BED REST / BRP
   OR GXACTV HOB UP
```

Enter/edit quick orders, cont'd

```
OR GXACTV MAY LEAVE WARD
OR GXACTV OUT OF BED
OR GXACTV PROVIDE TRAPEZE
OR GXACTV ROM EXERCISE
OR GXACTV TURN PATIENT
OR GXACTV UP IN CHAIR
OR GXACTV UP IN CHAIR TID
OR GXHEMO ARTERIAL LINE
OR GXHEMO ARTERIAL SHEATH
OR GXHEMO CARDIAC OUTPUT
OR GXHEMO HEMODYNAMICS ITEM
OR GXHEMO SWAN GANZ CATHETER
OR GXHEMO VENOUS SHEATH
OR GXNURS CHEST TUBE
OR GXNURS GLASCOW COMA
OR GXNURS GUAIAC ASPIRATE
OR GXNURS GUAIAC EMESIS
OR GXNURS GUAIAC STOOLS
OR GXNURS NEURO CHECK
OR GXNURS NURSING ITEM
OR GXNURS PUSH FLUIDS
OR GXNURS URINE PH
OR GXNURS URINE SPEC GRAV
OR GXOXGN MASK 35 PER CENT
OR GXOXGN MASK 40 PER CENT
OR GXOXGN MASK 50 PER CENT
OR GXOXGN O2 3 LT NASAL CANNUL
OR GXOXGN O2 4 LT NASAL CANNUL
OR GXOXGN OXYGEN THERAPY ITEM
OR GXOXGN VENTILATOR
OR GXPARM I AND O
OR GXRESP CHEST PT
OR GXRESP INCENTIVE SPIROMETER
OR GXRESP RESPIRATORY ITEM
OR GXRESP SUCTION
OR GXRESP TCDB
OR GXRESP TRACH CARE
OR GXSKIN AIR MATTRESS
OR GXSKIN COLD PACKS
OR GXSKIN SHEEPSKIN
OR GXSKIN SKIN AND WOUND ITEM
OR GXSKIN WARM PACKS
OR GXSKIN WARM SOAKS
OR GXSKIN WATER MATTRESS
OR GXTUBE COLOSTOMY
OR GXTUBE CONDOM CATHETER
OR GXTUBE DRAINS ITEM
OR GXTUBE HEMOVAC
OR GXTUBE ILEOSTOMY
OR GXTUBE INDWELLING URINARY C
OR GXTUBE JACKSON PRATT
OR GXTUBE NASOGASTRIC
OR GXTUBE PENROSE
OR GXTUBE RECTAL TUBE
OR GXTUBE SUPRAPUBIC CATHETER
OR GXTUBE UROSTOMY
You may enter a new ORDER DIALOG, if you wish
 Answer must be 3-63 characters in length.
```

Enter/edit quick orders, cont'd

Consults Quick Order Example

Currently the only way to stuff the defined reason for Request and not prompt to edit is to set GMRCREAF=1 in the entry action in file 101.41

Currently the only way to eliminate the prompts for Attention or Provisional Diagnosis while ordering is to set GMRCNOAT=1 or GMRCNOPD=1 respectively in the ENTRY ACTION of the quick order in file 101.41

```
Select OUICK ORDER NAME: GMRCZ EKG STAT ER
  Are you adding 'GMRCZ EKG STAT ER' as a new ORDER DIALOG? No// Y (Yes)
TYPE OF QUICK ORDER: CONSULTS
NAME: GMRCZ EKG STAT ER// <Enter>
DISPLAY TEXT: Stat EKG
VERIFY ORDER: <Enter>
DESCRIPTION:
  1> <Enter>
ENTRY ACTION: <Enter>
Consult to Service/Specialty: CARDIOLOGY
     1
        CARDIOLOGY
     2
        CARDIOLOGY CLINIC
CHOOSE 1-2: 1 CARDIOLOGY
Reason for Request:
  1>r/o MI and arrythmia
  2.>
EDIT Option: <Enter>
Category: OUTPATIENT
Urgency: STAT
Place of Consultation: EMERGENCY ROOM
Attention: <Enter>
Provisional Diagnosis: <Enter>
Consult to Service/Specialty: CARDIOLOGY
          Reason for Request: r/o MI and arrythmia
                    Category: OUTPATIENT
                     Urgency: STAT
       Place of Consultation: Emergency Room
(P)lace, (E)dit, or (C)ancel this quick order? PLACE// <Enter>
Select QUICK ORDER NAME: <Enter>
```

Select Order Menu Management Option: QO Enter/edit quick orders

NOTE: No changes are saved until PLACE is selected.

Diet Quick Order Example

```
Select QUICK ORDER NAME: OR FHWN3
 Are you adding 'OR FHWN3' as a new ORDER DIALOG? No// Y (Yes)
TYPE OF QUICK ORDER: DIET
    1 DIET ADDITIONAL ORDERS
        DIET ORDERS
CHOOSE 1-2: 2
DISPLAY TEXT: Junk Food
VERIFY ORDER: ?
    Enter YES to have orders created by this dialog presented to the
    user before saving, with the opportunity to edit.
    Choose from:
      1
      0
               NO
VERIFY ORDER: 0 NO
DESCRIPTION:
 1>Junk food consists of a double Mac cheeseburger with fries and
 2>a coke, available whenever the patient requests it.
 3> <Enter>
EDIT Option: <Enter>
Diets:
1. Diet: ?
Choose from:
  DIRT HIGH MINERAL
   HIGH MINERAL HIGH MINERAL
  REGULAR REGULAR
Enter a diet modifications to be ordered for this patient.
1. Diet: High Mineral
Effective date/time: NOW// <Enter>
Expiration date/time: <Enter>
Delivery: TRAY// <Enter>
Special Instructions: <Enter>
                     Diets: HIGH MINERAL
        Effective date/time: NOW
                  Delivery: TRAY
       Special Instructions: Always be polite (don't say "You shouldn't
   ______
(P)lace, (E)dit, or (C)ancel this quick order? PLACE// <Enter>
```

Up to five modifications are allowed.

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Select QUICK ORDER DIALOG NAME: <Enter>

IV Medications Quick Order Example

```
Select Order Menu Management Option:
                                     Enter/edit quick orders
Select OUICK ORDER NAME: PSJZ AMINOPH 1GM
 Are you adding 'PSJZ AMINOPH 1GM' as a new ORDER DIALOG? No// Y (Yes)
TYPE OF QUICK ORDER: IV MEDICATIONS
NAME: PSJZ AMINOPH 1GM// <Enter>
DISPLAY TEXT: Aminophylline drip
VERIFY ORDER: NO// <Enter>
DESCRIPTION:
 No existing text
  Edit? NO// <Enter>
Solution: D5W INJ, SOLN IV
Volume (in ml): 50// 1000
Additive: AMINOPHYLLINE INJ, SOLN IV AMINOPHYLLINE INJ, SOLN IV
AMINOPHYLLINE
INJ, SOLN IV
(Units for this additive are MG)
Strength: 1000
Another Additive: <Enter>
Infusion Rate: 10
Priority: ROUTINE// <Enter>Provider Comments:
1> Titrate to effect.
2> <Enter>
Edit OPTION: <Enter>
                  Solutions: D5W INJ, SOLN IV 1000 ml
                  Additives: AMINOPHYLLINE INJ, SOLN IV 1000 MG
               Infusion Rate: 10 ml/hr
                  Priority: ROUTINE
          Provider Comments: Titrate to effect.
(P)lace, (E)dit, or (C)ancel this quick order? PLACE//<Enter>
```

Lab Quick Order Example

```
Select QUICK ORDER NAME: LR GLUCOSE
NAME: LR GLUCOSE// <Enter>
DISPLAY TEXT: GLUCOSE// <Enter>
VERIFY ORDER: NO// <Enter>
DESCRIPTION:
 1><Enter>
ENTRY ACTION: <Enter>
Lab Test: GLUCOSE// <Enter>
SEND TO LAB - Means the patient is ambulatory and will be sent to the
Laboratory draw room to have blood drawn.
WARD COLLECT - Means that either the physician or a nurse will be
collecting the sample on the ward.
LAB BLOOD TEAM - Means the phlebotomist from Lab will draw the blood on
the ward. This method is limited to laboratory defined collection times.
              Send patient to lab
    WC
              Ward collect & deliver
    LC
              Lab blood team
Collected By: SP Send patient to lab
IS BLOOD MARBLED TOP the correct sample to collect? Yes// <Enter> YES
Collection Date/Time: N (JUN 18, 1997@14:11)
Enter Order Comment: <Enter>
                   Lab Test: GLUCOSE
               Collected By: Send patient to lab
           Collection Sample: BLOOD
                   Specimen: SERUM
       Collection Date/Time: NOW
(P)lace, (E)dit, or (C)ancel this quick order? PLACE//<Enter>
```

Outpatient Medications Quick Order Example

```
Select Order Menu Management Option: Enter/edit quick orders
Select QUICK ORDER NAME: PSO DIGOXIN QD
 Are you adding 'PSO DIGOXIN QD' as a new ORDER DIALOG? No// Y (Yes)
TYPE OF QUICK ORDER: OUTPATIENT MEDICATIONS
NAME: PSO DIGOXIN QD// <Enter>
DISPLAY TEXT: Digoxin QD (opt)
VERIFY ORDER: <Enter>
DESCRIPTION:
 No existing text
 Edit? NO// <Enter>
Medication: DIGOXIN TAB
Choose from:
   1 DIGOXIN 0.125MG TAB $0.210
   2 DIGOXIN 0.25MG TAB TAB $0.114
Dispense Drug: 2 DIGOXIN 0.25MG TAB TAB $0.114
Complex dose? NO// <cr>
Take (in TABLET(S)): 1
Route: ORAL// <Enter>
Schedule: QD
Limit duration to (in DAYS): 30
Quantity: 30
Refills (0-11): 1
Pick Up: WINDOW// <Enter>
Provider Instructions:
 No existing text
 Edit? No// <Enter> (No)
Priority: ROUTINE// <Enter>
                Medication: DIGOXIN TAB
              Dispense Drug: DIGOXIN 0.25MG TAB
                      Take: 1 TABLET(S) ORAL QD for 30 days
                   Quantity: 30
             Refills (0-11): 1
                   Pick Up: WINDOW
                   Priority: ROUTINE
                        SC: NO
  ______
(P)lace, (E)dit, or (C)ancel this quick order? PLACE// <Enter>
```

Selection of a

dispense drug is not required, but

order checking

will not occur

unless one is

defined.

Radiology Quick Order Example

```
Select Order Menu Management Option: Enter/edit quick orders
                  Select QUICK ORDER NAME: RAZ CHEST 2 VIEWS STAT TODAY
                  Are you adding 'RAZ CHEST 2 VIEWS STAT TODAY' as a new ORDER DIALOG? No// Y
                  (Yes)
                  TYPE OF QUICK ORDER: IMAGING
                  NAME: RAZ CHEST 2 VIEWS STAT TODAY Replace
                 DISPLAY TEXT: Stat Chest 2 views
                  VERIFY ORDER: N NO
                  DESCRIPTION:
                     1> <Enter>
                    Edit OPTION: <Enter>
                  Select one of the following imaging types:
                     NUCLEAR MEDICINE
                     GENERAL RADIOLOGY
 The Common
                 Select IMAGING TYPE: GENERAL RADIOLOGY
 Procedure list for
                 Common General Radiology Procedures:
 the selected
                                                         21 FOOT 3 OR MORE VIEWS
                    1 ABDOMEN 1 VIEW
 Imaging Type
                    2 ABDOMEN 2 VIEWS
                                                         22 FOREARM 2 VIEWS
 will be displayed.
                    3 ANKLE 3 OR MORE VIEWS
                                                        23 HAND 3 OR MORE VIEWS
                    4 CALCANEOUS 2 VIEWS
                                                        24 HIP 1 VIEW
                    5 CHEST 2 VIEWS PA&LAT
                                                        25 HUMERUS 2 OR MORE VIEWS
                                                        26 KNEE 3 VIEWS
27 NASAL BONES MIN 3 VIEWS
                    6 CHEST SINGLE VIEW
                    7 CHOLECYSTOGRAM ORAL CONT
                                                    27 NASAL BONES FILE S. .__...
28 NON-INVAS., DUPLEX SCAN OF CRAN
                    8 COLON AIR CONTRAST
                    9 COLON BARIUM ENEMA
                                                        29 PELVIS 1 VIEW
                   10 CT ABDOMEN W/O CONT 30 RIBS UNILAT 2 VIEWS
11 CT CERVICAL SPINE W/O CONT 31 SHOULDER 2 OR MORE VIEWS
                                                        32 SINUSES 3 OR MORE VIEWS
33 SKULL 4 OR MORE VIEWS
                   12 CT HEAD W/O CONT
                  14 CT MAXILLOFACIAL W/O CONT
15 CT NECK COET FIGURE
                                                        34 SPINE CERVICAL MIN 4 VIEWS
                   15 CT NECK SOFT TISSUE W/O CONT 35 SPINE LUMBOSACRAL MIN 2 VIEWS
                   16 CT THORAX W/O CONT
                                                         36 SPINE THORACIC 2 VIEWS
                   17 ELBOW 3 OR MORE VIEWS
                                                         37 TIBIA & FIBULA 2 VIEWS
                   18 ESOPHAGUS
                                                         38 UPPER GI AIR CONT W/O KUB
                   19 ESOPHAGUS RAPID SEQUENCE FILMS
                                                        39 UROGRAM IV W NEPHROTOMOGRAMS
                                                         40 WRIST 3 OR MORE VIEWS
                   20 FEMUR 2 VIEWS
                  Radiology Procedure: 5 CHEST 2 VIEWS PA&LAT
                  Modifier:
                 History and Reason for Exam:
If Category is left
                 1>
                            R/O pneumonia or mass.
                 2>
                            <Enter>
blank, the current
                    Edit OPTION: <Enter>
patient status will
be assumed.
                 Category: <Enter>
                 Is this patient scheduled for pre-op? NO// <Enter>
                 Date Desired: TODAY// T (AUG 30, 1997)
                 Mode of Transport: P PORTABLE
Submit Request to:
                  Is patient on isolation procedures? <Enter>
can be left blank to
                  Urgency: ROUTINE// STAT
allow the user to
                  Submit request to: TUSCALOOSA VAMC
direct the request to
the correct imaging
                           Radiology Procedure: CHEST 2 VIEWS PA&LAT
                  History and Reason for Exam: R/O pneumonia or mass.
location.
                                  Date Desired: NOW
                             Mode of Transport: PORTABLE
                                        Urgency: STAT
                              Submit request to: TUSCALOOSA VAMC
                  (P)lace, (E)dit, or (C)ancel this quick order? PLACE// <Enter>
```

Unit Dose Medications Quick Order Example

```
Select Order Menu Management Option: Enter/edit quick orders
Select QUICK ORDER NAME: PSJZ CIMETIDINE
  Are you adding 'PSJZ CIMETIDINE ' as a new ORDER DIALOG? No// Y (Yes)
TYPE OF QUICK ORDER: UNIT DOSE MEDICATIONS
NAME: PSJZ CIMETIDINE // <Enter>
DISPLAY TEXT: Tagamet q8h
VERIFY ORDER: <Enter>
DESCRIPTION:
1> <cr>>
  Edit OPTION: <Enter>
Medication: CIMETIDINE TAB
Choose from:
    1 CIMETIDINE 200MG TAB UD PK $0.018
    2 CIMETIDINE 300MG TAB UD PK $0.107
    3 CIMETIDINE 400MG TAB UD TAB $0.251
Dispense Drug: CIMETIDINE 200MG TAB UD PK $0.018
                                                     U.D.
Dosage: 200mg
Route: ORAL// <Enter>
Schedule: Q8H
Priority: ROUTINE// <Enter>
Provider Comments:
  No existing text Edit? No// <Enter> (No)
                 Medication: CIMETIDINE TAB
               Dispense Drug: CIMETIDINE 200MG TAB UD
                     Dosage: 200mg
                      Route: ORAL
                    Schedule: Q8H
                    Priority: ROUTINE
(P)lace, (E)dit, or (C)ancel this quick order? PLACE// <Enter>
```

Selection of a

dispense drug is

not required, but

order checking -

will not occur

unless one is

defined.

Vital Measurements Quick Order Example

```
Select Order Menu Management Option: Enter/edit quick orders
             Select QUICK ORDER NAME: GMRVZ BP
              Are you adding 'GMRVZ BP' as a new ORDER DIALOG? No// Y (Yes)
             TYPE OF QUICK ORDER: VITALS/MEASUREMENTS
             NAME: GMRVZ BP// <Enter>
             DISPLAY TEXT: BP Q4h
             VERIFY ORDER: <Enter>
             DESCRIPTION:
             1>
                      <Enter>
               Edit OPTION: <Enter>
             Vital Sign: B/P
             Start Date/Time: NOW
             Schedule: Q4H
             Stop Date/Time: NOW
             Special Instructions: <cr>>
              ______
                             Vital Sign: B/P
                         Start Date/Time: NOW
                                Schedule: Q4H
                          Stop Date/Time: NOW
The dialog will
be repeated
after first
             (P)lace, (E)dit, or (C)ancel this quick order? PLACE// EDIT
editing the
             Vital Sign: B/P// <Enter>
             Start Date/Time: NOW// <Enter>
quick order if
             Schedule: Q4H// <Enter>
EDIT is chosen.
             Stop Date/Time: NOW// @
              Are you sure you want to delete this value? NO// YES
             Special Instructions: <Enter>
                             Vital Sign: B/P
                         Start Date/Time: NOW
                               Schedule: Q4H
             (P)lace, (E)dit, or (C)ancel this quick order? PLACE// <Enter>
```

Enter/Edit Order Sets

This option lets you add or edit order sets. Order sets are groups of quick orders that are commonly ordered together for certain situations, such as pre-admission, pre-operative, etc. The sets can be created through this option by selecting quick orders from all services. Then when you enter the order screens for CPRS, you can pick an order set by the name you gave it in this option.

NOTE: Order Sets in CPRS are slightly different than they were in OE/RR v 2.5. In version 2.5, order sets could be of the protocol menu type where ordering items could be grouped and the user would choose which items to order from that menu. Order sets could also be extended action type protocols which ordered all of the items upon choice of the order set. CPRS considers all order sets to be extended action types and doesn't prompt the user for the items contained within.

1. Select Enter/edit order sets from the Order Menu Management menu

```
Enter/edit orderable items
  PM
         Enter/edit prompts
         Enter/edit generic orders
  GO
  00
         Enter/edit quick orders
  ST
         Enter/edit order sets
  AC
         Enter/edit actions
  MN
         Enter/edit order menus
  ΑO
         Assign Primary Order Menu
  CP
         Convert protocols
         Search/replace components
  T.M
         List Primary Order Menu
You have PENDING ALERTS
         Enter "VA
                                       to review alerts
                     VIEW ALERTS
Select Order Menu Management Option: st Enter/edit order sets
```

2. Enter an order set name (either a pre-existing one or a new one).

```
Select ORDER SET NAME: ??
Answer with ORDER DIALOG NAME
Do you want the entire ORDER DIALOG List? Y (Yes)
Choose from:
   ORZ GMENU AD PROTOCOL
   ORZ GMENU ROPES COURSE VERBAL
   ORZ GMENU SLIDING SCALE INSULI
   ORZ GMENU URINE DRUGS OF ABUSE
   ORZ GSET MAURI
   ORZ GXTEXT NPO AT MN X MEDS
   ORZ GXTEXT NPO X MEDS
   PSJOOS ACET PO/PR
   PSJQOS ACETPO/PR
  PSJQOS ADMIT 3ET
  PSJQOS ADMIT 61C
Press RETURN to continue or ^ to exit: ^
You may enter a new ORDER DIALOG, if you wish
```

Enter/edit order sets, cont'd

```
Select ORDER SET NAME: ZZPRE-OP

Are you adding 'ZZPRE-OP' as a new ORDER DIALOG? No// Y (Yes)

Do you wish to copy an existing order set? YES// NO

NAME: PRE-OP//<Enter>
DISPLAY TEXT: Pre-Operative Order Set

DESCRIPTION:

1>A set of standard orders for patients prior to surgery

2><Enter>
EDIT Option:<Enter>
```

3. Enter the items you want to include in the order set.

```
Select ORDER SET COMPONENT: ?
    This field specifies the order in which this item will be displayed
    or processed.
Select ORDER SET COMPONENT: 1
SEOUENCE: 1//<Enter>
ITEM: ADMIT PATIENT OR GXMOVE ADMIT PATIENT
Select ORDER SET COMPONENT: 2
SEQUENCE: 2//<Enter>
ITEM: LRTZ CHEM 7
Select ORDER SET COMPONENT: 3
SEQUENCE: 3//<Enter>
ITEM: ACETOMENOPHINE??
    Enter an order dialog; a dialog that is an ancestor may not also be a
    sub-item.
Answer with ORDER DIALOG NAME, or DISPLAY TEXTITEM: ??
   This field points to an order dialog which is subordinate to this.
    dialog NOTE: The parent dialog menu or one of its ancestors may not
    be entered as an item.
ITEM: ORWD GENERIC VITALS
Select ORDER SET COMPONENT: 4
SEQUENCE: 4//<Enter>
ITEM: <Enter>
```

Enter/Edit Actions

This option provides the equivalent of a feature of OE/RR 2.5 that allowed sites to have access to a protocol's entry or exit actions. This enables you to add Surgery or other programs to a CPRS menu.

NOTE: This option is intended for programmers who can modify M code.

```
Enter/edit orderable items
   PM
          Enter/edit prompts
   GO
          Enter/edit generic orders
          Enter/edit quick orders
   QO
         Enter/edit order sets
   ST
   AC
         Enter/edit actions
   MN
        Enter/edit order menus
   ΑO
        Assign Primary Order Menu
   CP
         Convert protocols
   SR
         Search/replace components
        List Primary Order Menu
   LM
You have PENDING ALERTS
         Enter "VA VIEW ALERTS
                                      to review alerts
Select Order Menu Management Option: AC Enter/edit actions
Select ACTION NAME: ?
Answer with ORDER DIALOG NAME
Do you want the entire ORDER DIALOG List? Y (Yes)
Choose from:
  LRX NEW COLLECTION TYPE
   LRX NEW TIME
   ZDGOERR TRANSFER
     This is the name of the dialog; entries that were converted from the
     Protocol file will retain the same name. Namespacing is not required,
     but still encouraged.
    You may enter a new ORDER DIALOG, if you wish
    Answer must be 3-63 characters in length.
Select ACTION NAME: ZDGOERR TRANSFER
NAME: ZDGOERR TRANSFER// <Enter>
DISPLAY TEXT: TRANSFER PATIENT// <Enter>
ENTRY ACTION: D SAVE^ORXD S DGPMT=2 D LO^DGUTL,OREN^DGPMV K VAINDT D
INP^VADPT,R
EAD^ORUTL
           Replace <Enter>
EXIT ACTION: K DGPMASIH D RSTR^ORXD Replace <Enter>
DESCRIPTION:
 1><Enter>
Select ACTION NAME: <Enter>
```

Enter/Edit Order Menus

Use this option to edit the items on an existing order menu or to create new order menus. Order menus you create here will be available to your users in both the List Manager and GUI interfaces when you assign them as primary order menus.

Order Menus in CPRS are just one type of Order dialog.

All add order menus in CPRS are order menus. Add order menus in CPRS allow great customization. In addition to adding, deleting, and editing items, you now have the ability to insert headers or titles to further organize the ordering items. You may add or delete rows as well and you can define the exact position of a specific item, as opposed to items shifting when an item is inserted.

To make order menus as friendly to users as possible, you should try to keep the length of the menu to 17 rows. When the menu is displayed to users, they will only be able to see the first 17 rows of a menu on the first page. Longer menus force users to scroll to the next screen to see all of the available items. This can lead to frustration and mistakes by new users because order items are "hidden" from view.

- NOTE: In OE/RR v 2.5, order sets could be created by using the protocol menu type, which allowed the selection of items to be ordered. In CPRS, these order sets are now order menus and allow the same customization as described above.
- **NOTE:** We recommend that you add "Z" or your local namespace to new items that you create. This isn't required, but it helps for distinguishing local changes from exported items.
 - 1. Select Enter/edit order menus from the CPRS Implementation Menu.

```
Select Option: Order Menu Management Option
   \capT
         Enter/edit orderable items
   РM
        Enter/edit prompts
   GO
         Enter/edit generic orders
         Enter/edit quick orders
   QO
         Enter/edit order sets
   AC
         Enter/edit actions
         Enter/edit order menus
  MN
   AΟ
         Assign Primary Order Menu
   CP
         Convert protocols
   SR
         Search/replace components
         List Primary Order Menu
You have PENDING ALERTS
         Enter "VA VIEW ALERTS
                                     to review alerts
Select Order Menu Management Option: mn Enter/edit order menus
```

2. Select an existing menu to add items to or enter the name of a new menu.

```
Select ORDER MENU: ?
Answer with ORDER DIALOG NAME
Do you want the entire ORDER DIALOG List? Y (Yes)
Choose from:
FHWMENU
GMRVORMENU
OR ADD MENU CLINICIAN
OR GMENU ACTIVITY ORDERS
OR GMENU ORDER SETS
OR GMENU OTHER ORDERS
OR GMENU OTHER ORDERS
OR GMENU PATIENT CARE ORDERS
OR GXMOVE PATIENT MOVEMENT

You may enter a new ORDER DIALOG, if you wish
Answer must be 3-63 characters in length.
Select ORDER MENU: ORZ ADD MENU CLINICIAN
```

3. The menu editor appears. Choose an action (add items, remove items, edit items, etc.). Note that the menu editor has horizontal and vertical coordinates. These let you specify where on the menu to place items.

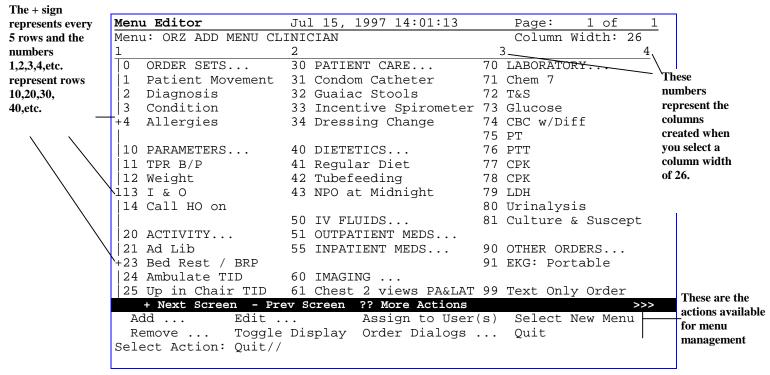
Clinician Menu Example

1. Select Enter/edit order menus, then enter ORZ ADD MENU CLINICIAN.

```
Select Order Menu Management Option: mn Enter/edit order menus
Select ORDER MENU: ORZ ADD MENU CLINICIAN
```

2. After the Menu Editor screen appears, select Add to add items, then select Menu, to add menu items.

Clinician Menu Example



3. Answer the following prompts about the new orderable.

Enter/edit order menus, cont'd

4. The new menu appears with your new item on it. You can now perform any of the actions listed below: Add another item, remove an item, edit, toggle display (to show the technical name of the item; e.g., ORZ GXACTV, instead of the menu text), assign to User(s), etc.

Menu	ı Editor	Jul 15, 1997 14:01:13		Page: 1 of 1		
Menu: OR ADD MENU CLINICIAN Column Width:						
1		2	3	4		
0	ORDER SETS	30 PATIENT CARE	70	LABORATORY		
1	Patient Movement	31 Condom Catheter	71	Chem 7		
2	Diagnosis	32 Guaiac Stools	72	T&S		
3	Condition	33 Incentive Spirometer	73	Glucose		
+4	Allergies	34 Dressing Change	74	CBC w/Diff		
			75	PT		
10	PARAMETERS	40 DIETETICS	76	PTT		
		41 Regular Diet	77	CPK		
12	Weight	42 Tubefeeding	78	CPK		
113	I & O	43 NPO at Midnight	79	LDH		
14	Call HO on		80	Urinalysis		
		50 IV FLUIDS	81	Culture & Suscept		
20	ACTIVITY	51 OUTPATIENT MEDS				
	Ad Lib	55 INPATIENT MEDS	90	OTHER ORDERS		
	Bed Rest / BRP		91	EKG: Portable		
24	Ambulate TID					
	Exercise		99	Text Only Order		
	+ Next Screen - Prev			>>>		
		Assign to Use				
		le Display Order Dialogs		. Quit		
Sele	ect Action: Quit// A	Add Items				

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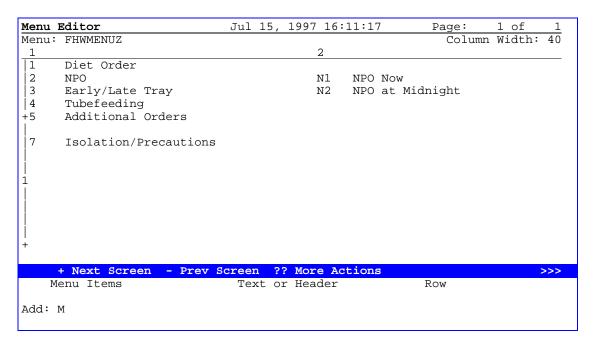
Dietetics Order Menu Example

1. Select Enter/edit order menus, then enter FHMENUZ for Dietetics.

```
Select Order Menu Management Option: mn Enter/edit order menus
Select ORDER MENU: FHMENUZ
```

2. After the Menu Editor screen appears, select the Add action.

```
Menu Editor
                           Jul 15, 1997 16:11:17
                                                          Page:
                                                                   1 of
Menu: FHWMENUZ
                                                            Column Width: 40
                                         2
      Diet Order
1
2
      NPO
                                         N1
                                               NPO Now
                                              NPO at Midnight
                                         N2
      Early/Late Tray
4
      Tubefeeding
+5
      Additional Orders
      Isolation/Precautions
  + Next Screen - Prev Screen ?? More Actions
                    Edit ...
                                        Assign to User(s)
                                                             Select New Menu
 Remove ...
                    Toggle Display
                                        Order Dialogs ...
                                                             Quit
Select Action: Quit// A ADD
```



Enter/edit order menus, cont'd

3. Answer the following prompts about the new orderable.

```
ITEM: FHW9Z

ROW: 4

COLUMN: 2

DISPLAY TEXT: Junk Food

MNEMONIC: JF

ITEM: <Enter>

Rebuilding menu display ...
```

```
Menu Editor
                          Jul 15, 1997 16:20:20
                                                          Page:
                                                                   1 of
Menu: FHWMENU
                                                            Column Width: 40
1
1
      Diet Order
 2
      NPO
                                          N1
                                               NPO Now
 3
                                               NPO at Midnight
      Early/Late Tray
                                          N2
      Tubefeeding
4
                                          JF
                                               Junk Food
      Additional Orders
+5
      Isolation/Precautions
+ Next Screen - Prev Screen ?? More Actions
                    Edit ...
  Add ...
                                        Assign to User(s)
                                                            Select New Menu
                                        Order Dialogs ...
 Remove ...
                    Toggle Display
                                                            Quit
Select Action: Quit// ASSIGN TO USER(S)
```

Assign Primary Order Menu

This option is used to assign a primary order menu to users. A primary order menu must be assigned to each user who will add orders in CPRS. This menu appears in the List Manager interface after assignment.

Examples of menus assigned to users:

OR ADD MENU CLINICIAN
OR ADD MENU NURSE
OR ADD MENU WARD CLERK
ORZ ADD MENU DR BROWN

```
Enter/edit orderable items
  PM
        Enter/edit prompts
       Enter/edit generic orders
  GO
  00
       Enter/edit quick orders
       Enter/edit order sets
  ST
  AC
        Enter/edit actions
  MN
        Enter/edit order menus
  AΩ
       Assign Primary Order Menu
       Convert protocols
  SR
       Search/replace components
     List Primary Order Menu
  LM
You have PENDING ALERTS
        Enter "VA VIEW ALERTS to review alerts
Select Order Menu Management Option: A Assign Primary Order Menu
Select NEW PERSON NAME: GREEN, JOANN
                                    ja
Add Orders Menu Default for User: GREEN, JOANN
______
Add New Orders
                                          ORZ ADD MENU CLINICIAN
______
Add Order Menu Default: ORZ ADD MENU CLINICIAN// <Enter> ORZ ADD MENU
CLINICIAN
  OΤ
       Enter/edit orderable items
      Enter/edit prompts
  DM
       Enter/edit generic orders
  QΟ
       Enter/edit quick orders
       Enter/edit order sets
  ST
        Enter/edit actions
  AC
        Enter/edit order menus
  MN
       Assign Primary Order Menu
  AΟ
  CP
       Convert protocols
  SR
       Search/replace components
      List Primary Order Menu
You have PENDING ALERTS
        Enter "VA VIEW ALERTS to review alerts
Select Order Menu Management Option: <Enter>
```

Convert Protocols

This option lets you convert individual protocols used in OE/RR 2.5 to CPRS orderable items.

- **NOTE:** Most protocols currently on OE/RR 2.5 menus at a site are automatically converted to CPRS menus. However, many quick orders created by sites have entry and exit actions containing M code, which the conversion utility can't convert. Before converting these, you need to use the *Enter/Edit Orderable Items* to delete the entry and exit actions.
 - **1.** Select Convert Protocols from the Order Menu Management menu on the CPRS Implementation menu.

```
Select CPRS Configuration Menu Option: MM Order Menu Management
         Enter/edit orderable items
  PM
         Enter/edit prompts
  GO
         Enter/edit generic orders
  00
         Enter/edit quick orders
         Enter/edit order sets
  ST
  AC
         Enter/edit actions
  MN
         Enter/edit order menus
  ΑO
         Assign primary order menu
  CP
         Convert protocols
  SR
          Search/replace components
  T.M
         List Primary Order Menu
Select Order Menu Management Option: CP Convert protocols
```

2. Enter the protocol name that you want to convert.

```
Select PROTOCOL NAME: ?
Answer with PROTOCOL NAME, or ITEM TEXT, or SYNONYM, or ACCESS, or SET MEMBERSHIP
Do you want the entire 3405-Entry PROTOCOL List? N (NO)
Select PROTOCOL NAME:LRTZ CHOLESTEROL SERUM MARBLED
Add this item to the same menus again? YES// <Enter>
Converting ...done
```

Search/Replace Components

This option lets you search for a specific component (orderable item, order dialog, order set, protocol, etc.). You can then replace any or all instances of the component with a new component or delete the component. The option displays the ancestors of the component to let you choose which instances to change.

Example

```
Enter/edit orderable items
   OI
   PM
         Enter/edit prompts
   GO
         Enter/edit generic orders
   QO
         Enter/edit quick orders
   ST
         Enter/edit order sets
   AC
         Enter/edit actions
         Enter/edit order menus
  MN
  ΑO
         Assign Primary Order Menu
   CP
         Convert protocols
   SR
         Search/replace components
         List Primary Order Menu
Select Order Menu Management Option: SR Search/replace components
Search for: LRTZ
        LRTZ CBC
     2
        LRTZ CBC W/DIFF
        LRTZ GLUCOSE SERUM
     4
        LRTZ UA
CHOOSE 1-4: 1
Ancestors of LRTZ CBC
                   _____
    ORZ ADD MENU CLINICIAN
   LRZ TEST SET
                                                                  order set
Replace LRTZ CBC with: ?
Enter the name of the item you to replace this one with, or @ to remove
this item; to quit without changing anything, press <return>.
Replace LRTZ CBC with: LRTZ CBC W/DIFF
Replace in: 1-2// 1
Are you ready? NO// YES
Replacing LRTZ CBC with LRTZ CBC W/DIFF in:
   ORZ ADD MENU CLINICIAN ...done.
Search for: <Enter>
   OI
         Enter/edit orderable items
   PM
         Enter/edit prompts
  GO
         Enter/edit generic orders
   QO
         Enter/edit quick orders
   ST
         Enter/edit order sets
  AC
         Enter/edit actions
  MN
         Enter/edit order menus
         Assign Primary Order Menu
  AΩ
         Convert protocols
  CP
   SR
         Search/replace components
  LM
         List Primary Order Menu
Select Order Menu Management Option: <Enter>
```

This prompt lets you select which of the ancestors of this component to change. If you take the default (which will always include all of the ancestors), you will replace or delete all instances of this component.

List Primary Order Menus

This option lets you print a list of all the users who have a particular add order menu assigned to them. You will also get a list of the locations, divisions etc. that have those menus. You can also request a complete list of all add order menus and all users.

Example

```
OI
          Enter/edit orderable items
   PM
          Enter/edit prompts
  GO
         Enter/edit generic orders
         Enter/edit quick orders
         Enter/edit order sets
  ST
  AC
         Enter/edit actions
  MN
         Enter/edit order menus
  ΑO
         Assign Primary Order Menu
  CP
         Convert protocols
  SR
          Search/replace components
  T<sub>1</sub>M
         List Primary Order Menus
Select Order Menu Management Option: LM List Primary Order Menus
START WITH Add order menu: FIRST// OR ADD MENU CLINICIAN
DEVICE: ANYWHERE RIGHT MARGIN: 80//
CPRS Add order menu list
                                      NOV 2,1998 09:09 PAGE 1
Menu
                                     User/Location/etc.
OR ADD MENU CLINICIAN
                                       ORDER ENTRY/RESULTS REPORTING
                                       ORNETTE COLEMAN
                                       MILES DAVIS
                                      HERBIE HANCOCK
                                       SHIRLEY HORN
                                      DIANA KRALL
                                       TOM WAITS
```

9. Patient and Team Lists

If your site has patient and team lists set up through OE/RR 2.5, these will be automatically converted during the installation process. Review these after the installation, and modify, if necessary.

Creating Patient or Team Lists

Clinicians can create patient lists by ward, clinic, or by patient to use for displaying results or creating reports. They can build lists, delete lists, merge lists, add or delete patients from lists, or inquire to a file of patient lists.

Clinical Coordinators can help to set up team lists for groups of clinicians and related hospital personnel. Clinicians can create patient lists by ward, clinic, or by patient to use for displaying results or creating reports. They can build lists, delete lists, merge lists, add or delete patients from lists, or inquire to a file of patient lists.

If a user has a list defined and loaded (as determined in the Personal Preferences options), the list will be available every time the user selects the CPRS Clinician, Nurse, or Ward Clerk Menu. The user will then select a patient from the list. This list can also be used for printing reports.

The team lists also help determine who receives notifications for patients defined on the lists.

Patient List Mgmt Menu

Option Text	Option Name	Description
Team List Mgmt Menu	ORLP TEAM MENU	Options on this menu allow you to create team patient lists. You can create or add autolinks to a
		team list, review existing team lists, remove patients or users from team lists, delete autolinks
		from an existing team list or delete an entire
		team list.
Patient Selection	ORLP3M	This menu allows IRM to set ORLP default
Preference Mgmt	DEFAULT MGR	patient list parameters for all entities that are
	MENU	allowed except PACKAGE.
Display User's Teams	ORLP3M USER	Displays teams from the OE/RR LIST file
	TEAMS	[#100.21] linked to a user.
Display Patients Linked	ORLP3M USER	Displays patients linked to a user via teams from
to a User via Teams	PTS VIA TEAMS	the OE/RR LIST file [#100.21].

Team List Mgmt Menu

Option Text	Option Name	Description
Create/Add to Team List	ORLP TEAM ADD	This option allows team list creation or
		the addition of autolinks, providers,
		and/or patients to existing lists.
Examine/Print Existing	ORLP EXAMINE/	This option allows you to examine or
List(s)	PRINT	print an existing patient list.
Remove Providers	ORLP TEAM DELETE	Use this option remove users/providers
from a List	USERS	from a team list.
Remove Patients from a	DELETE PATI	Use this option to remove patients from a
List	ENTS	team list.
Delete Existing List(s)	ORLP TEAM DELETE	When you no longer need a team list that
		you have built, you can use this option to
		delete the list.
Remove Autolinks	ORLP TEAM DELETE	This option is used to remove existing
	AUTOLINKS	Autolinks from a team list and the patients
		associated with the removed autolinks.

Create/Add to Team List Example

```
Select Team List Mgmt Menu Option: CR Create/Add to
                                                         Team List
A team list is a list containing patients related to several providers.
These providers are the list's users. You may now create a new team list
or add autolinks, users and/or patients to an existing team list. Autolinks
automatically add or remove patients with ADT movements. Users on the list
may receive notifications regarding patients on the same list. Please prefix
your list name with 'TEAM' or 'SERVICE' (e.g. TEAM7B, SERVICECARDIOLOGY.)
Enter team list name: teamqa
 Are you adding 'teamqa' as a new OE/RR LIST? No// y (Yes)
    This is the type of list being defined. List type currently includes
    team and personal.
    o Team lists
         o TM - Manually maintained (addition and removal)
         o TA - Maintained by Autolinks for addition and removal of
                 patients.
         o MRAL - Manual removal of patients from the list with Autolink
             addition of patients to the list.
    o Personal lists
         o P - Manually maintained (addition and removal)
     Choose from:
               PERSONAL PATIENT
      P
      TA
               TEAM PATIENT AUTOLINKED
      TМ
               TEAM PATIENT MANUAL
      MRAL
               MANUAL REMOVAL/AUTOLINK ADDITION
```

Create/Add to Team List, cont'd

```
TYPE: TM TEAM PATIENT MANUAL
     Select one of the following:
                    NAME
          M
          W
                    WARD
          С
                    CLINIC
                    PROVIDER
          Р
          Т
                    TREATING SPECIALTY
    to enter additional patients. (? for help): ?
You may add patients to this list individually by patient NAME, or as a
group such as an entire WARD, patients in a CLINIC, all patients seeing
a PROVIDER, or patients in a TREATING SPECIALTY.
                         ** CAUTION **
The patients added here will create a static list that will not change
through MAS movements.
     Select one of the following:
          N
                   NAME
          W
                    WARD
          С
                    CLINIC
                   PROVIDER
          D
                    TREATING SPECIALTY
    to enter additional patients. (? for help): CLINIC
Select CLINIC: CARDIOLOGY
Patient Appointment STARTING DATE: T//T-60 (AUG 28, 1997)
Patient Appointment ENDING DATE: AUG 28, 1997//T+60 (DEC 26, 1997)
Working...
Select CLINIC:
    12 patient(s) added.
    Storing list for future reference...
     Select one of the following:
          M
                    NAME
          W
                    WARD
          С
                    CLINIC
          Ρ
                    PROVIDER
                    TREATING SPECIALTY
    to enter additional patients. (? for help): <Enter>
 Enter Team Provider/User: <Enter>
  Enter Device: <Enter>
```

Patient Selection Preference Management Menu

This menu on the Clinical Coordinator Menu or on a clinician's Personal Preferences Menu contains options that let coordinators or users set default parameters for patient lists.

Option	Description
Display User's Patient List Source	Display a user's default patient list source.
Set Preferred Clinic Start Date	Patients with appointment dates as early as this date will be added to the Clinic List. Patients will be added with appointment dates between START DATE and STOP DATE.
Set Preferred Clinic Stop Date	Patients with appointment dates as recent as this date will be added to the Clinic List. Patients will be added with appointment dates between START DATE and STOP DATE.
Set Preferred Clinic Sunday	Clinic to be default source of Sunday's patient list.
Set Preferred Clinic Monday	Clinic to be default source of Monday's patient list.
Set Preferred Clinic Tuesday	Clinic to be default of Tuesday's patient list.
Set Preferred Clinic Wednesday	Clinic to be default source of Wednesday's patient list.
Set Preferred Clinic Thursday	Clinic to be default source of Thursday's patient list.
Set Preferred Clinic Friday	Clinic to be source of Friday's patient list.
Set Preferred Clinic Saturday	Clinic to be default source of Saturday's patient list.
Set Preferred Sort Order for Patient List	Default sort order for the patient list. Room/Bed is valid only for impatients list (Ward, Team/Personal, Provider, Specialty). Appointment Date is valid only for outpatient lists (Clinic)
Set Preferred List Source	Default preference for patient list source.
Set Preferred Primary Provider	Provider who is basis for building the Provider Lst of patients.
Set Preferred Treating Specialty	Treating Specialty used as a source for patients on the Specialty List.
Set Preferred Team List	Team/Personal list to be default source of patients.
Set Preferred Ward	Ward for default list of patients.

Display your Patient List Source example

```
Select Patient Selection Preference Menu Option: 1 Display Your Patient List Source

Your default list of patients is based on: Ward 2B 
<RETURN> to continue: <Enter>
Select Patient Selection Preference Menu Option: 13 Set Default Provider

Walue: GREEN, JOANN // Welby, Doctor
```

10. Print Formats

The CPRS *Print Formats* option allows a lot of flexibility in customizing reports for CPRS. Each site must select the print formats it will use for printing labels, requisitions, order copies, and chart copies. The hospital's Medical Records Committee needs to approve the print formats chosen for its site. Be sure to determine how many printers you'll need for each ward, and where they'll be located.

We distribute pre-defined print formats that point to pre-defined print fields. You may copy these to a number space between 1 and 999 and modify these for your use. If the pre-defined print fields don't satisfy your print requirements, then create a new field in the CPRS PRINT FIELDS file in the number space between 1 and 999. If you are transferring an entry in the PRINT FIELDS file (#100.22) to the 1-999 range for local use, answer "NO" to the prompt "Do you want the pointers updated?"; otherwise, existing print formats that depend on old definitions will be altered.

Definitions

Print type	Definition
Service copy	Copies of orders and actions for a particular service that can be
	printed upon request for the use of that service. The service copy
	can also be set up for automatic printing at a defined location
	(usually in the service). Contains header, body, and footer.
Chart Copy	A copy of all current orders that appear on a patient's chart, using
	a pre-defined format. Each hospital can only have one format for
	Chart Copies. Chart copies can also be automatically printed on
	the ward. This is the official copy for the medical record.
Work Copy	A working copy of order(s) that will be kept
Requisition	A working copy of order(s) that will be sent with the order to the
	service.
Label	A copy of the order that is printed on a label to be stuck on the
	container of the order (e.g., a medication or a lab sample).

Defining a New Print Format

```
Select Clinical Coordinators Menu Option: FP Print Formats
Select CPRS PRINT FORMATS NAME: ?
Answer with CPRS PRINT FORMATS NUMBER, or NAME
Do you want the entire 26-Entry OE/RR PRINT FORMATS List? Y (Yes)
Choose from:
                  LAB LABEL/INTERMEC
                 LOCAL RX LABEL
  1002
                  LAB ORDER LABEL
  1003
                  LAB REQUISITION
                 CHART COPY 1
  1004
  1005
                 CHART COPY 2
  1006
                 CHART COPY HEADER
  1007
                 CHART COPY FOOTER
  1008
                 SHORT
  1009
                 LONG
  1010
                 DOCTOR'S ORDERS
  1011
                CONSULTATION FOOTER
                CONSULTATION HEADER
  1012
                CONSULTATION BODY
  1013
                CHART COPY BODY DOCTORS ORDERS FOOTER
  1015
  1016
                DOCTOR'S ORDERS HEADER
  1017
  1018
                LAB SERVICE COPY HEADER
                RX HEADER
  1019
                LAB LABEL (Buffalo)
  1020
  1021
                 RX FOOTER
  1022
                 GENERIC ORDER LABEL
  1023
                 WORK COPY FORMAT
  1024
                  WORK COPY HEADER
  1025
                  WORK COPY FOOTER
  1026
                  RX LABEL FORMAT
Select OE/RR PRINT FORMATS NAME: DOCTORS ORDERS
NAME: DOCTORS ORDERS// <Enter>
Select FIELDS: AGE of Patient// ?
Answer with FIELDS
Choose from:
  NAME of Patient
                     Row: 1
                                  Col: 41
                                              Caption: NONE
                                 Col: 41
Col: 66
  SSN of Patient
                     Row:
                                              Caption: NONE
  AGE of Patient
                            2
                                              Caption: NONE
                    Row:
  DOB of Patient
                   Row: 2
                                 Col: 55
                                            Caption: NONE
  REQUESTING PHYSICIAN Row: 4
                                       Col: 1 Caption:
  ROOM/BED of Patient
                         Row: 3
                                      Col: 58
                                                   Caption: NONE
                      Row: 4
2 Col:
  LOCATION of Patient
                                     Col: 58
                                                   Caption: NONE
                                        Caption: NONE
  ORDER TEXT Row:
                                    1
                                   1
                Row: 1
  START DATE
                                          Caption: Start Date:
                             Col:
    You may enter a new FIELDS, if you wish
    Enter the field to be added to this format.
Answer with OE/RR PRINT FIELDS NUMBER, or NAME
Do you want the entire 59-Entry OE/RR PRINT FIELDS List? Y (Yes)
Choose from:
                  LAB INTERMEC ORDER LABEL
  2.
                 RX INTERMEC MAR LABEL
  1001
                 NAME of Patient
  1002
                  SSN of Patient
                 SEX of Patient
  1003
                 AGE of Patient
  1004
  1005
                 DOB of Patient
  1006
                REQUESTING LOCATION
                  REQUESTING PHYSICIAN
  1007
  1008
                  ROOM/BED of Patient
```

Defining a new Print Format (cont'd)

```
LOCATION of Patient
   1009
   1010
                   ORDER TEXT
   1011
                   START DATE
   1012
                  STOP DATE
  1013
                  ORDER DATE
                 FREE TEXT
  1015
                 ATTENDING PHYSICIAN
                 COLLECTION TYPE (LAB)
   1016
   1017
                  LAB ORDER #
                  LAB TEST
  1018
                 LAB URGENCY
  1019
  1020
                 TIME COLLECTED
                 ENTERED BY
   1021
                 STATUS OF ORDER
ELECTRONIC SIGNATURE NAME
   1022
   1026
                 ENTERED BY (Initials)
  1028
   1029
                 HORIZONTAL LINE
                 NATURE OF ORDER
  1032
                 CURRENT DATE
   1033
   1034
                  REASON FOR REQUEST
                 PROVISIONAL DIAGNOSIS
  1035
  1036
                 CONSULTANT
  1037
                 PLACE OF CONSULTATION
                 CONSULT URGENCY
  1038
                 REQUEST TYPE
LAB ACCESSION
   1039
   1040
  1041
                 PROCEDURE/CONSULT TYPE
   1042
                 ELECTRONIC SIGNATURE TITLE
                 LAB COLLECTION w/CONTAINER
  1043
                 CURRENT DATE/TIME DC by & when
   1044
   1045
                 WARD COMMENTS ON LAB SPECIMEN
  1046
  1047
                 RX ADMINISTRATION TIMES
  1048
                 RX SPECIAL INSTRUCTIONS
                 PRIMARY CARE PHYSICIAN
  1050
   1070
                  DC REASON
                  DC PERSON
  1071
  1072
                 DC DATE
   1074
                 WHEN PRINTED
                 EFFECTIVE DATE
  1075
                 RX LABEL-INPATIENT
   1076
   1077
                  LAB TEST.SPECIMEN COMMENTS
                 LAB TEST COMMENTS
  1078
  1079
                 CONSULT RESULTS
                 RX ROUTING
  1080
                 DIGITAL PAGER CLINICIAN
   1081
                  ANALOG PAGER CLINICIAN
   1082
   1083
                  RX URGENCY
  1084
                  ENTERED BY SIGNATURE TITLE
Select FIELDS: START DATE
...OK? Yes// (Yes)
         Row:
               1
                        Col:
                               1
                                     Caption: Start Date:
 FIELDS: START DATE// <Enter>
 ROW: 1//<Enter>
 COLUMN: 1//<Enter>
 CAPTION (Optional): Start Date: //<Enter>
 SUPPRESS CAPTION: ?
    Answer YES to suppress printing of caption when no data for
field.
     Choose from:
      0
               NO
                YES
  SUPPRESS CAPTION: 1
```

Defining a new Print Format (cont'd)

```
YES FORMAT: ?
    Enter the format specifier of the selected field.
     Allowable values include:
         - Numeric months
    MM
        - Numeric Days
    DD
        - Numeric Years
    CC
        - Numeric Century
    HR
            Numeric Hour of Day
    MIN - Numeric Minute
    SEC - Numeric Second
    AMTH - Alphabetic Month
     All other characters will be treated as delimiters.
    Examples: MM/DD/YY HR:MIN ==> 04/29/91 11:15, or
                  DD AMTH CCYY ==> 29 APR 1991
 FORMAT: MM/DD HR:MIN
Select FIELDS: ORDER TEXT
...OK? Yes// <Enter> (Yes)
         Row: 2
                       Col:
                                     Caption: NONE
 FIELDS: ORDER TEXT// <Enter>
 ROW: 2//<Enter>
 COLUMN: 1//<Enter>
 CAPTION (Optional): NONE//<Enter>
 SUPPRESS CAPTION: Y YES
 FORMAT: 38//<Enter>
Select FIELDS: NAME of Patient
...OK? Yes//
              (Yes)
         Row: 4
                       Col: 1
                                     Caption:
 FIELDS: NAME of Patient// <Enter>
 ROW: 4//<Enter>
 COLUMN: 1//<Enter>
 CAPTION (Optional): <Enter>
  SUPPRESS CAPTION: Y YES FORMAT: ?
    Enter the format specifier of the selected field.
     Allowable values include:
    LAST - Last Name
    FIRST - First Name
    MI - Middle Initial
          - First Initial
         - Last Initial
    LI
     All other characters will be treated as delimiters.
     Examples: LAST, FIRST MI ==> DOE, JOHN M or
                  FI MI LAST ==> J M DOE
 FORMAT: LAST, FI
Select FIELDS:<Enter>
```

Defining a new Print Format (cont'd)

The format above is the result of the selections you have made for fields, row #s and column #s. It can be the format used for requisitions, labels, service order copies, work copies, and chart copy printouts you (or a clinician) request through the "Order Entry/ Review/Profiles" option.

Example of the Chart Copy as defined in the options above

MEDICAL RECORD	DOCTOR'S ORDERS
NOTE: Physician's signature must accompany each Date and time for instituting and discontinuing	
DATE & TIME ORDERS	SIGNATURES
04/07 15:04 Diet Order: REGULAR	/es/ MAL,D, Chief of Staff
03/22 10:24 CT THORAX W&W/O CONT LEFT /es/ M	AROSE,C, Att. Phys.
ANDRUS, R 234-23-8382 Loc: Date: 02/06/92	MEDICAL RECORD DOCTOR'S ORDERS VA FORM 10-1158

NOTE: The title is taken from the name entered in the SIGNATURE BLOCK field in the *Edit Electronic Signature Code* on the Personal Preferences menu.

Exported Print Formats

LAB ORDER LABEL LAB REQUISITION CHART COPY 1 CHART COPY 2 CHART COPY HEADER CHART COPY FOOTER SHORT LONG DOCTOR'S ORDERS CONSULTATION FOOTER CONSULTATION HEADER CONSULTATION BODY CHART COPY BODY DOCTORS ORDERS FOOTER DOCTOR'S ORDERS HEADER LAB SERVICE COPY HEADER RX HEADER LAB LABEL (Buffalo) RX FOOTER GENERIC ORDER LABEL WORK COPY FORMAT WORK COPY HEADER WORK COPY FOOTER RX LABEL FORMAT

Print Formats—Review and Print orders

After you have defined the print formats for your hospital, wards, and clinics, the print options can be used to review or print copies from CPRS screens — either in the GUI or List Manager Interfaces.

An example of the sequence of actions to get to the print options for the List Manager interface is shown below:

1. After selecting a patient, select the Chart Contents (CC) action.

Cover Sheet	Jun 26, 1997 08:34:01	Page: 1 of 3					
ANDERSON, H C 321-12-3456	2B	JAN 1,1951 (46) <cwa></cwa>					
Item Allergies/Adverse Rea PENICILLIN 1 (rash, n	!	Entered 01/03/97	_				
2 BEESWAX (hives, itchi anxiety)	03/28/97						
Patient Postings 7 CRISIS NOTE		06/18/97 08:28					
+ Enter the numbers of	the items you wish to	act on. >>>					
NW Add New Orders CG Change List SP Select New Patient + Next Screen CC Chart Contents Q Close Patient Chart Select: Next Screen//CC;O Chart Contents							
Searching for the patient's chart							

SHORTCUT You can enter CC for Chart Contents followed by a semicolon, followed by an action from the Chart Contents screen: CC;O, to skip a screen.

2. When the Orders screen appears, enter the number of an order to review.

Active Orders Jun 26, 1997 0	8:34:31	Page: 1 of	17		
		,1951 (46) <0			
Selected date range: Not Applicable (a	ctive orders	being viewed)			
Item Ordered	Requestor	Start Stop	Sts		
1 Electrocardiogram Bedside	ARCENEAU, C		pend		
2 GLUCOSE SERUM WC QD	KLARK,D	06/18 06/21	actv		
3 GENTAMICIN CREAM, TOP ONCE TOP ONCE	KLARK,D		pend		
4 TRIAMCINOLONE 0.1% CREAM 454GM Apply 1 DAB TOP Q2H for 10 DAYS days Quantity: 1 refills PROVIDER INSTRUCTIONS GO HERE	INSLEY,M 		pend		
5 ENALAPRIL 10MG Quantity: 1 5 refills TAKE ONE PILL QD	INSLEY,M	06/15 06/16	pend		
6 PARTIAL THROMBOPLASTIN TIME PLASMA WC LB #1304	INSLEY,M	05/21/97 16:14	pend		
7 Reaction to NOIS CALLS Feb 10, 1997	INSLEY,M	02/10/97	actv		
8 GLUCOSE SERUM WC LB #1295	DEFA,T	05/21/97 10:48	pend		
+ Enter the numbers of the items you wish	to act on.		>>>		
NW Add New Orders CG Change List SP Select New Patient + Next Screen CC Chart Contents Q Close Patient Chart Select: Next Screen// 4					

Review and Print orders, cont'd

3. The order you selected is highlighted.

A new set of actions, which you can perform on this order, appears.

Active Orders Jun 26, 1997 08:40:13 Pa							Page:	1 of	17
ANDERSON, H C 321-12-3456				2B			1,1951		
Selected date range: Not Applicable (ac					•	. ,			
Item Ordered						Requestor	_		Sts
1	Electrocardiog	ram Bedsid	.e			ARCENEAU, C			pend
2	GLUCOSE SERUM	WC QD			İ	KLARK,D	06/18	06/21	actv
3	DAB TOP Q2H f		_		1				
	GENTAMICIN CR					KLARK,D			pend
4	TRIAMCINOLONE				Į,	INSLEY,M			pend
	refills PROVI								
5	ENALAPRIL 10M TAKE ONE PILL	~ 1	: 15	refills		INSLEY,M	06/15	06/16	pend
6	6 PARTIAL THROMBOPLASTIN TIME PLASMA WC LB #1304			3	INSLEY,M	05/21/ 16:14	97	pend	
7	Reaction to NC	OIS CALLS F	eb 10,	1997	İ	INSLEY,M	02/10/	97	actv
8	GLUCOSE SERUM	WC LB #12	95		İ	DEFA,T	05/21/ 10:48	97	pend
+	Enter ??	for more a	ctions						>>>
(Change	Sign		Flag		Details		Print	
]	Renew	Hold		Unflag		Results			
]	Discontinue Release Hold Ward Comment					s Alert Re	esults		
Se	lect Action: P	Print							

4. If you select Print, the available Print types are presented

Active Orders Jun 26, 1997 08:40:13 Page: 1 of 17							
ANDERSON, H C 321-12-3456	JAN	1,1951	(46)	<cwa></cwa>			
Selected date range:	Not Applicable (a	active orders	being v	viewed)			
Item Ordered		Requestor	Start	Stop	Sts		
1 Electrocardiogram Bedsid	le	ARCENEAU, C			pend		
2 GLUCOSE SERUM WC QD		KLARK,D	06/18	06/21	actv		
3 DAB TOP Q2H for 10 DAYS	. ~ .	!			_		
GENTAMICIN CREAM, TOP ON		KLARK,D			pend		
4 TRIAMCINOLONE 0.1% CREAM		INSLEY,M			pend		
refills PROVIDER INSTRU		<mark> </mark>					
5 ENALAPRIL 10MG Quantity	y: 1 5 refills	INSLEY,M	06/15	06/16	pend		
TAKE ONE PILL QD		[
6 PARTIAL THROMBOPLASTIN T #1304	TIME PLASMA WC LB	INSLEY,M 	05/21/9 16:14	97	pend		
7 Reaction to NOIS CALLS F	Feb 10, 1997	INSLEY,M	02/10/	97	actv		
8 GLUCOSE SERUM WC LB #12	295	DEFA,T	05/21/9	97	pend		
			10:48		_		
+ Enter ?? for more a	actions				>>>		
Labels	Work Copies	S	ervice (Copies			
Requisitions	Labels						
Select type of print:							

11. Print/Report Parameters

The Print/Report Parameters menu contains options for editing the parameters of various types of reports printed at hospitals. It should be available to the clinical coordinator and IRM Staff.

Option Name	Menu Text	Description
OR PARAM CHART	Chart Copy Parameters	This option is for editing hospital wide
COPY		Chart Copy parameters.
OR PARAM WORK	Work Copy Parameters	This option is for editing Work Copy site
COPY		parameters.
OR PARAM SERVICE	Service Copy	This option is for editing Service Copy site
COPY	Parameters	parameters.
OR PARAM	Requisition/Label	This option is for editing requisition and
REQ/LABEL	Parameters	label site parameters.
OR PARAM	Summary Report	This option is for editing Summary Report
SUMMARY REPORTS	Parameters	site parameters.
OR PARAM PRINTS	Print Parameters for	This option is for editing hospital wide
(HOSP)	Hospital	print parameters for CPRS.
OR PARAM PRINTS	Print Parameters for	This option is for editing print parameters
(LOC)	Wards/Clinics	for each ward/clinic location.

Chart Copy Parameters

Chart Copies are the official copy for the record of all current orders that appear on a patient's chart, using a pre-defined format. Each hospital can only have one format for Chart Copies. Chart copies can also be automatically printed on the ward.

```
Select CPRS Configuration Menu (Clin Coord) Option: PE Print/Report
Parameters
   CC
           Chart Copy Parameters
   WC
          Work Copy Parameters
   SC
          Service Copy Parameters
          Requisition/Label Parameters
Summary Report Parameters
   RE
   IJΜ
          Print Parameters for Hospital
   HO
          Print Parameters for Wards/Clinics
You have PENDING ALERTS
                                              to review alerts
           Enter "VA VIEW ALERTS
Select Print/Report Parameters Option: CC Chart Copy Parameters
Chart Copy Definition for System: OEX.ISC-SLC.VA.GOV
 ______
Chart Copy Format
                                                            DOCTOR'S ORDERS
Chart Copy Header
                                                            CHART COPY HEADER
                                                            CHART COPY FOOTER
Chart Copy Footer
Expand Continuous Orders
                                                            NO
Print Chart Copy When
                                                            signing orders
CHART COPY FORMAT: DOCTOR'S ORDERS// ??
Choose from:
                     LAB LABEL/INTERMEC
   1
                    LAB ORDER LABEL
LAB REQUISITION
CHART COPY 1
   1002
   1003
   1004
                CHART COPY 2
CHART COPY HEADER
CHART COPY FOOTER
SHORT
LONG
DOCTOR'S ORDERS
CONSULTATION FOOTER
CONSULTATION HEADER
CONSULTATION BODY
CHART COPY BODY
DOCTORS ORDERS FOOTER
DOCTOR'S ORDERS HEADER
LAB SERVICE COPY HEADER
RX HEADER
LAB LABEL (Buffalo)
RX FOOTER
GENERIC ORDER LABEL
WORK COPY FORMAT
   1005
                    CHART COPY 2
   1006
   1007
   1008
   1009
   1010
   1011
   1012
   1013
   1015
   1016
   1017
   1018
   1019
   1020
   1021
   1022
   1023
                     WORK COPY FORMAT
   1024
                    WORK COPY HEADER
```

Chart Copy Parameters, cont'd

```
1025
                  WORK COPY FOOTER
   1026
                  RX LABEL FORMAT
CHART COPY FORMAT: DOCTOR'S ORDERS// <Enter> DOCTOR'S ORDERS
CHART COPY HEADER: CHART COPY HEADER// <Enter> CHART COPY HEADER
CHART COPY FOOTER: CHART COPY FOOTER// <Enter> CHART COPY FOOTER
EXPAND CONTINUOUS ORDERS: NO// ??
This is a site parameter to enable continuous orders (i.e., orders with a
continuous schedule, e.g., QD or Q4H) to be expanded or not on the chart
copy. If set to YES, an order for GLUCOSE BLOOD SERUM with the schedule
QD would appear on the chart as:
 05/17 11:04 GLUCOSE BLOOD SERUM
                                                   Marcus Welby, MD
              LB #805 WC ROUTINE
 05/18 11:04 GLUCOSE BLOOD SERUM
                                                   Marcus Welby, MD
              LB #806
                       WC ROUTINE
05/19 11:04 GLUCOSE BLOOD SERUM
                                                   Marcus Welby, MD
              LB #807
                        WC ROUTINE
If this parameter is set to NO, the same order would appear as:
05/17 11:04 GLUCOSE BLOOD SERUM QD
                                                   Marcus Welby, MD
EXPAND CONTINUOUS ORDERS: NO// <Enter>
PRINT CHART COPY WHEN: signing orders// ?
'R' prints chart copy when orders are released; 'S' prints when orders
signed.
Select one of the following:
         R
                   releasing order
         S
                   signing orders
PRINT CHART COPY WHEN: signing orders// ??
Chart copies may be printed when orders are
 a) released to the service
 b) signed by a clinician (may be after the orders are released)
This parameter determines at which point the chart copy of orders will
print. The chart copy may be printed when the order is released to the
service or delayed until the order is actually signed.
PRINT CHART COPY WHEN: signing orders// R releasing order
  CC
         Chart Copy Parameters
  WC
         Work Copy Parameters
   SC
         Service Copy Parameters
  RE
         Requisition/Label Parameters
         Summary Report Parameters
  IJM
  НО
         Print Parameters for Hospital
  T<sub>i</sub>Ω
         Print Parameters for Wards/Clinics
You have PENDING ALERTS
         Enter "VA VIEW ALERTS to review alerts
Select Print/Report Parameters Option: <Enter>
```

Work Copy Parameters

```
Select CPRS Configuration Menu (Clin Coord) Option: PE Print/Report
Parameters
  CC
        Chart Copy Parameters
  WC
        Work Copy Parameters
  SC
       Service Copy Parameters
       Requisition/Label Parameters
  RE
  UM
        Summary Report Parameters
  HO Print Parameters for Hospital
LO Print Parameters for Wards/Clinics
Select Print/Report Parameters Option: W Work Copy Parameters
Work Copy Definition for System: OEX.ISC-SLC.VA.GOV
-----
Work Copy Format
                                            WORK COPY FORMAT
Work Copy Header
                                            WORK COPY HEADER
Work Copy Footer
                                            WORK COPY FOOTER
______
WORK COPY FORMAT: WORK COPY FORMAT// <Enter> WORK COPY FORMAT
WORK COPY HEADER: WORK COPY HEADER// <Enter> WORK COPY HEADER
WORK COPY FOOTER: WORK COPY FOOTER// <Enter> WORK COPY FOOTER
  CC
        Chart Copy Parameters
  WC
        Work Copy Parameters
  SC
        Service Copy Parameters
       Requisition/Label Parameters
  RE
  UM
       Summary Report Parameters
  HO Print Parameters for Hospital
  LO
       Print Parameters for Wards/Clinics
Select Print/Report Parameters Option:<Enter>
```

Service Copy Parameters

This option is for editing Service Copy site parameters.

```
Select CPRS Configuration Menu (Clin Coord) Option: PE Print/Report
Parameters
   CC
          Chart Copy Parameters
         Work Copy Parameters
   SC
         Service Copy Parameters
   RE
         Requisition/Label Parameters
   IJΜ
          Summary Report Parameters
   НО
          Print Parameters for Hospital
         Print Parameters for Wards/Clinics
   T<sub>1</sub>O
You have PENDING ALERTS
          Enter "VA VIEW ALERTS to review alerts
Select Print/Report Parameters Option: SC Service Copy Parameters
 Service Copy Parameters
Select PACKAGE: LAB SERVICE
                                       LR
Service Copy Definition for System: OEX.ISC-SLC.VA.GOV, LAB SERVICE
Service Copy Format LAB SERVICE DOCTOR'S ORDERS
Service Copy Header LAB SERVICE LAB SERVICE COPY HEADER
Service Copy Footer LAB SERVICE CHART COPY FOOTER
Service Copy Default Device LAB SERVICE LASER
______
 FORMAT: DOCTOR'S ORDERS// ?
 Answer with OE/RR PRINT FORMATS NUMBER, or NAME
Do you want the entire 25-Entry OE/RR PRINT FORMATS List? N (No)
 FORMAT: DOCTOR'S ORDERS// <Enter> DOCTOR'S ORDERS
 HEADER: LAB SERVICE COPY HEADER// <Enter> LAB SERVICE COPY HEADER
  FOOTER: CHART COPY FOOTER// <Enter> CHART COPY FOOTER
 DEVICE: LASER// <Enter> LASER PRINTER ROOM LN11 12 PITCH
Service Copy Definition for System: OEX.ISC-SLC.VA.GOV, LAB SERVICE is now:
Service Copy Format LAB SERVICE DOCTOR'S ORDERS
Service Copy Header LAB SERVICE LAB SERVICE COPY HEADER
Service Copy Footer LAB SERVICE CHART COPY FOOTER
Service Copy Default Device LAB SERVICE LASER
______
Enter RETURN to continue or '^' to exit: <Enter>
   CC
        Chart Copy Parameters
   WC
          Work Copy Parameters
   SC
          Service Copy Parameters
   RE
         Requisition/Label Parameters
         Summary Report Parameters
   MΤ
        Miscellaneous OE/RR Parameters
       Print Parameters for Hospital
   НО
          Print Parameters for Wards/Clinics
You have PENDING ALERTS
     Enter "VA VIEW ALERTS
                                    to review alerts
Select Parameter Edit Option: <Enter>
```

Requisition/Label Parameters

This option is for editing print parameters for requisitions or labels. A Requisition is a working copy of order(s) that will be sent with the order to the service. It doesn't contain a header or footer.

```
Select Print/Report Parameters Option: RE Requisition/Label Parameters
Requisition/Label Definition for System: OEX.ISC-SLC.VA.GOV
Ward Requisition Format LAB SERVICE LAB REQUISITION
RADIOLOGY/NUCLEAR MEDICINE CHART COPY BODY
                           MEDICINE DOCTOR'S ORDERS
                           CONSULT TRACKING
Ward Requisition Header RADIOLOGY/NUCLEAR MEDICINE CHART COPY HEADER
Ward Requisition Footer RADIOLOGY/NUCLEAR MEDICINE CHART COPY FOOTER
Ward Label Format LAB SERVICE LAB ORDER LABEL
Ward Label Format

LAB SERVICE

RADIOLOGY/NUCLEAR MEDICINE GENERIC ORDER LABEL
                           INPATIENT MEDICATIONS RX LABEL FORMAT
                          MEDICINE DOCTOR'S ORDERS
For Ward Requisition Format -
Select package: PHARMACY
   1
       PHARMACY
Are you adding PHARMACY as a new package? Yes// <Enter> YES
package: PHARMACY// <Enter> PHARMACY PS PHARMACY
WARD REQUISITION FORMAT: DOCTOR'S ORDERS
For Ward Requisition Format -
Select package: < Enter>
For Ward Requisition Header -
Select package: PHARMACY
                                  PS
Are you adding PHARMACY as a new package? Yes// <Enter> YES
package: PHARMACY// <Enter> PHARMACY PS PHARMACY
WARD REQUISTION HEADER: RX HEADER
For Ward Requisition Header -
Select package: <Enter>
For Ward Requisition Footer -
Select package: PHARMACY
                                 PS
Are you adding PHARMACY as a new package? Yes// <Enter> YES
package: PHARMACY// <Enter> PHARMACY PS PHARMACY
WARD REQUISTITION FOOTER: RX FOOTER
For Ward Requisition Footer -
Select package: <Enter>
For Ward Label Format -
Select PACKAGE: PHARMACY
Are you adding PHARMACY as a new PACKAGE? Yes// <Enter> YES
PACKAGE: PHARMACY// <Enter> PHARMACY PS PHARMACY
WARD LABEL FORMAT: RX LABEL FORMAT
For Ward Label Format
Select PACKAGE: <Enter>
```

Summary Report Parameters

This option is for editing Summary Report site parameters.

```
CC
          Chart Copy Parameters
   WC
          Work Copy Parameters
         Service Copy Parameters
  SC
         Requisition/Label Parameters
  RE
  UM
         Summary Report Parameters
  НО
         Print Parameters for Hospital
   LO
         Print Parameters for Wards/Clinics
You have PENDING ALERTS
         Enter "VA VIEW ALERTS
                                       to review alerts
Select Print/Report Parameters Option: UM Summary Report Parameters
Summary Report Definition for System: OEX.ISC-SLC.VA.GOV
Chart Copy Summary Sort Forward
                                                  YES
Work Copy Summary Sort Forward
                                                  YES
CHART SUMMARY ORDER: YES// ?
Enter YES to have the Chart Copy Summaries sort by forward date/time.
CHART SUMMARY ORDER: YES// ??
This parameter allows the Chart Copy summaries to print in forward
chronological order.
CHART SUMMARY ORDER: YES// <Enter>
WORK COPY SUMMARY SORT: YES// ?
Enter YES to have the Work Copy Summaries sort by forward date/time.
WORK COPY SUMMARY SORT: YES// ??
This parameter allows the Work Copy summaries to print in forward
chronological order.
WORK COPY SUMMARY SORT: YES// <Enter>
```

Print Parameters for Hospital

This option is for editing hospital-wide print parameters for CPRS.

```
Select Print/Report Parameters Option: ho Print Parameters for Hospital
Miscellaneous Hospital Prints for System: OEX.ISC-SLC.VA.GOV
 _____
Initials on Summary
Requisition Sort Field LAB SERVICE
Label Sort Field LAB SERVICE
                                              SAMPLE
                            LAB SERVICE
                                                SAMPLE
Order Summary Sort Forward
                                                YES
PRINT INITIALS ON SUMMARY REPORT: YES// ??
This parameter allows the initials of the person who entered the order to
be displayed on the order summary reports. The initials take up an
additional line on the display and are shown just below the Ord'd date
time.
PRINT INITIALS ON SUMMARY REPORT: YES// n NO
For Requisition Sort Field -
Select package: ?
    package
                                  Value
     _____
                                  ____
    LAB SERVICE
                                  SAMPLE
Answer with PACKAGE NAME, or PREFIX, or SYNONYM, or ROUTINE
Do you want the entire 280-Entry PACKAGE List? n (No)
Select package: dietetics
Are you adding DIETETICS as a new package? Yes//<Enter>
package: DIETETICS// <Enter> DIETETICS FH DIETETICS
REQUISITION SORT FIELD: ?
Enter the field name to sort requisitions by.
REQUISITION SORT FIELD: ??
This is the field as defined at the ^OR(100,ifn,4.5 level in file 100
to be used to sort requisitions by.
REQUISITION SORT FIELD: dietetics
For Requisition Sort Field -
Select package: radiology
    1 RADIOLOGY - HL7
                                RAHL
    RADIOLOGY PATCH 23 RAAE
RADIOLOGY PATCH INIT4
    4 RADIOLOGY PATCH18 INIT RADI
                                      RAAF
     5 RADIOLOGY/NUCLEAR MEDICINE
CHOOSE 1-5: 5 RADIOLOGY/NUCLEAR MEDICINE
For Label Sort Field -
Select package: dietetics
Are you adding DIETETICS as a new package? Yes//<Enter>
SUMMARY SORT FORWARD: YES// ??
This parameter allows the Order summaries to print in forward
chronological order.
SUMMARY SORT FORWARD: YES// <Enter>
```

Print Parameters for Wards/Clinics

This option is for editing print parameters for each ward/clinic location.

```
Select Print/Report Parameters Option: LO Print Parameters for Wards/ Clinics
Select HOSPITAL LOCATION NAME: XRAY CLINIC
Print Definition (Loc) for Location: XRAY CLINIC
Chart Copy Print Device
                                                WORK
Prompt for Chart Copy
                                                DON'T PROMPT
Work Copy Print Device
                                                WORK
Prompt for Work Copy
                                                DON'T PROMPT
Requisition Print Device
                                                WORK
Prompt for Requisitions
                                                PROMPT AND ASK DEVICE
Label Print Device
                                                WORK
Prompt for Labels
                                                DON'T PROMPT
Daily Order Summary Device
                                                WORK
Service Copy Default Device RADIOLOGY/NUCLEAR MEDICINE WORK
Print Chart Copy Summary
Print Daily Order Summary
CHART COPY PRINT DEVICE: WORK// ?
Answer with DEVICE NAME, or LOCAL SYNONYM, or $1, or VOLUME SET(CPU), or
    SIGN-ON/SYSTEM DEVICE, or SUBTYPE, or FORM CURRENTLY MOUNTED
Do you want the entire DEVICE List? N (No)
CHART COPY PRINT DEVICE: WORK// <Enter> WORK OTC
                                                             _LTA33:
PROMPT FOR CHART COPY: DON'T PROMPT// ?
Specify how the printing of chart copies will work for this location.
   Select one of the following:
         Ω
                  DON'T PROMPT
         1
                  PROMPT AND ASK DEVICE
                  PROMPT AND NOT ASK DEVICE
                   DON'T PRINT
PROMPT FOR CHART COPY: DON'T PROMPT// ??
This field allows various levels of user interaction for printing a
chart copy of the orders.
 ENTER 0 for no prompts- chart copy is automatically generated.
       1 to prompt for chart copy and ask which printer should be used.
        2 to prompt for chart copy and automatically print to the
         printer defined in the CHART COPY PRINT DEVICE field.
        * don't print.
PROMPT FOR CHART COPY: DON'T PROMPT// 1 PROMPT AND ASK DEVICE
WORK COPY PRINT DEVICE: WORK// <Enter> WORK OTC _LTA33:
PROMPT FOR WORK COPY: DON'T PROMPT// 1 PROMPT AND ASK DEVICE
REQUISITION PRINT DEVICE: WORK// <Enter> WORK OTC
                                                            _LTA33:
PROMPT FOR REQUISITIONS: PROMPT AND ASK DEVICE//<Enter>
LABEL PRINT DEVICE: WORK// LABEL
       LABEL PRINTER NAME _LTA9999:
LABEL TABLE INTERMEC 4100 LABEL TABLE
    1 LABEL PRINTER NAME
                                                       _LTA370:
    2.
CHOOSE 1-2: 2 INTERMEC 4100
```

Print Parameters for Wards/Clinics, cont'd

```
PROMPT FOR LABELS: DON'T PROMPT// <Enter>
DAILY ORDER SUMMARY DEVICE: WORK// <Enter> WORK
                                                      OTC
                                                                _LTA33:
For Service Copy Default Device -
Select PACKAGE: LAB
        LAB HL7 OERR
                              LR70
    1
                              LA7
        LAB MESSAGING
        LAB ORDER ENTRY
                                 LRX
       LAB PRE-RELEASE OERR_V3
                                         LR02
       LAB SERVICE
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 3
Are you adding LAB ORDER ENTRY as a new PACKAGE? Yes//<Enter>
                                                               YES
PACKAGE: LAB ORDER ENTRY//<Enter> LAB ORDER ENTRY LRX LAB ORDER ENTRY
SERVICE COPY DEVICE: WORK
        WORK WORK
                     OTC
                                  _LTA33:
        WORK SHORT WORK
                              BOX ROOM
                                              _LTA33:
                            Workstation Redirector
        WORKSTATION
                                                        WS.DAT
                                                                    OER
       WORK VIC CARD
                             REGISTRATION
                                              WORK
CHOOSE 1-4: 1 WORK
For Service Copy Default Device -
Select PACKAGE: < Enter>
PRINT CHART COPY SUMMARY: ?
Specify whether chart copy summary will print for this location.
PRINT CHART COPY SUMMARY: ??
This parameter specifies to the nightly background job ORTASK 24HR CHART
COPIES that a daily Chart Copy summary should be queued to the device
specified by the CHART COPY DEVICE field.
PRINT CHART COPY SUMMARY: YES
PRINT DAILY ORDER SUMMARY: YES
         Chart Copy Parameters
  WC
         Work Copy Parameters
   SC
         Service Copy Parameters
  RE
         Requisition/Label Parameters
  TJM
         Summary Report Parameters
  НО
         Print Parameters for Hospital
  LO
         Print Parameters for Wards/Clinics
Select Print/Report Parameters Option: < Enter>
```

12. Release/Delete Delayed Orders

This option lets coordinators or IRMS release or cancel delayed orders that haven't been processed for some reason.

Sel Ord	ect CPRS Configuration (C ers	lin Coord) Option	: RE Release	/Cancel Delaye	ed
War	d 1A	Nov 01, 1997 15	:08:52 Pa	age: 1 of	1
Cur	rent patient: ** No patie	nt selected **			
	Patient Name	ID	DOB	Room-Bed	
1	DOE, WILLIAM C.	(D6572)	Sep 12, 1944	A-2	
2	FEET, SMELL E.	(F1990)	Dec 31, 1951		
3	HOOD, ROBIN	(H2591)	Apr 25, 1931		
4	KIMINATOR, THE	(K3241)	May 06, 1932		
5	LAY, FRITO	(L8333)	Feb 02, 1923	B-5	
6	MUFFET, LITTELLA M	(M7689)	Sep 01, 1950	B-4	
7	NEW, PATIENT	(N1234)	Apr 04, 1911		
	Enter the number o	f the patient cha	rt to be open	ed	
+	Next Screen CV	Change View	FD Fi	nd Patient	
-	Previous Screen SV	Save as Default	List Q Cl	ose	
	ect Patient: Close// 5 VETERAN	LAY,FRITO	02-02-23	299388333	YES

Delayed Orders No	ov 12, 1997 08:00:	51 Page:	1 of	1
LAY, FRITO 299-38-8333	1A/B-5	FEB 2,1923	(74)	<a>
Selected o	date range: None S	Selected		
Item Ordered		Delayed Until		
1 ACETAMINOPHEN 325MG Take 2	2 TABLET(S) PO	Discharge		
Q4H Quantity: 100 0 refil	ls			
2 IBUPROFEN SUSP 1TSP PO Q	6H Quantity: 1 0	Discharge		
refills				
Enter the numbers of the		to act on.		>>>
+ Next Screen - I	Previous Screen	Q Quit		
Select: Quit// 1				

Delayed Orders	Nov 12, 1997 08:00:	:51 Page: 1 of	1
LAY, FRITO 299-38-8333	1A/B-5	FEB 2,1923 (74)	<a>
Selecte	ed date range: None S	Selected	
Item Ordered		Delayed Until	
1 ACETAMINOPHEN 325MG Tak Q4H Quantity: 100 0 ref	` ′	Discharge 	
2 IBUPROFEN SUSP 1TSP PO refills	O Q6H Quantity: 1 0	Discharge	
Enter the numbers of Release to service	E the items you wish t Cancel	Detailed Display	>>>
Select action: C Cancel Are you sure you want to car Deleted	ncel these order(s)? N	NO// YES	

C. CPRS Configuration (IRM)

OR PARAM IRM MENU

This menu is only available to those with Programmer access (holders of the XUPROG key). IRMS staff can assign options on this menu at their discretion.

Option	Menu Text	Description
OCX MAIN	Order Check Expert System Main Menu	These options are used for troubleshooting Order Checking and Notifications, for compiling the expert system rules, and for linking local terms with national terms for order checking.
ORMTIME MAIN	ORMTIME Main Menu	These options are intended for IRMS only, and are used in conjunction with the ORTASK routines.
ORE MGR	CPRS Clean-up Utilities	This menu contains an option that checks consistency between lab files and OE/RR files.
XPAR MENU TOOLS	General Parameter Tools	This menu contains general purpose tools for managing parameters.

1. Order Check Expert System

Order Checking and Notifications both rely on a subset of CPRS called the Order Check Expert System. This includes a library of rules, elements, and a data dictionary, as well as facilities to maintain these data sets. Eventually the Expert System may be used for clinicians and others to create rules of their own by combining entities, elements, and rules.

How it works:

The Order Check Expert System is based on a set of Rules or Medical Logic Modules (MLM). The term Medical Logic Module, synonymous with rule or frame, is derived from the Arden Syntax, a standard for sharing MLMs and knowledge bases among decision support developers. The Order Check Expert System will support the Arden Syntax and will be able to share knowledge bases with other nonprofit entities.

At this point, the Expert System is mostly used as a compiler and as a tool for monitoring and debugging Order Checking and Notifications. The options on the Order Check Expert System Main Menu can be used to perform these functions.

Compiler

The compiler generates routines. The OCX post-install routine runs the compiler to generate an initial set of Order Checking routines. The post-install runs the compiler with default compiler options. One of the options is called Execution Trace. The default for this option is NO. When this option is set to YES, the compiler adds write statements to the compiled code that displays various aspects of the runtime environment. It displays information about the runtime datastream as well as the sequence of line labels as the compiled routine set executes. When this option is set to NO it does not add these additional statements. Adding this extra code makes the compiled routines bigger, but, since the compiler has a routine size limit (4k) imposed on it, it tends to make more routines instead. Thus, you may wind up with more routines.

Order Check Expert System Main Menu

- 1 Compile Rules [OCX RUN COMPILER]
 2 Expert System Rule Activate/Inactivate [OCX RULE ACTIVATE]
 - 3 Edit Site Local Terms [OCX LOCAL TERM EDIT]
 4 Expert System Inquire [OCX EXPERT SYSTEM INQUIRE]

Edit Site Local Terms

After CPRS installation, each site must run this option to link terms used in the expert system to local terms. Some terms like DNR and NPO diet must be mapped to one or more entries in the orderable item file. Other terms like Serum Creatinine must be mapped to the lab test file.

Nat'l Expert System Term	Linked File	Order Check
SERUM CREATININE	LAB [60]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65
SERUM UREA NITROGEN	LAB [60]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65
ANGIOGRAM,CATH – PERIPHERA	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
PROTHROMBIN TIME	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
THROMBOPLASTIN TIME PARTIA	OI [101.43]	MISSING LAB TESTS FOR ANGIOGRAM PROCEDUR
WHITE BLOOD COUNT (WBC)	LAB [60]	CLOZAPINE APPROPRIATENESS
BLOOD SPECIMEN	TOPOG [61]	CLOZAPINE APPROPRIATENESS
SERUM SPECIMEN	TOPOG [61]	AMINOGLYCOSIDE ORDERED
		BIOCHEM ABNORMALITY FOR CONTRAST MEDIA
		ESTIMATED CREATININE CLEARANCE
		RENAL FUNCTIONS OVER AGE 65

Edit Site Local Terms Example

```
Select OPTION NAME: OCX MAIN
                                   Order Check Expert System Main Menu
         Compile Rules
         Expert System Rule Activate/Inactivate
  2
         Edit Site Local Terms
         Expert System Inquire
Select Order Check Expert System Main Menu Option: 3 Edit Site Local
Terms
  Order Check National Terms
    SERUM CREATININE
    SERUM UREA NITROGEN
    PROTHROMBIN TIME
    THROMBOPLASTIN TIME PARTIAL
    NPO
    SERUM SPECIMEN
    PARTIAL THROMBOPLASTIN TIME
    ANGIOGRAM (PERIPHERAL)
    WBC
      < Enter ?? to see the rest of the national terms on this list>
Select National Term: PROTHROMBIN TIME
National Term: PROTHROMBIN TIME
 Translated from file: 'LABORATORY TEST' 60
Select LABORATORY TEST NAME: PT
          467 PT
Select LABORATORY TEST name: <Enter>
```

After you exit *Edit Site Local Terms*, the Expert System automatically runs the compiler. When the compiler is finished, the following e-mail message is automatically sent:

Mail Message

```
Subj: Order Check Compiler Status [#16691] 13 Jan 98 10:53 14 Lines
From: POSTMASTER (Sender: GREEN, JOANN) in 'IN' basket. Page 1 **NEW**

The Order Check routine compiler has completed normally
on JAN 13,1998 at 10:53 by [15] GREEN, JOANN.

ORDER CHECK EXPERT version 1.0 (rev15) released DEC 15,1997 at 12:18

Elapsed time: 6 minutes 50 seconds
Queued
Execution Trace Mode: ON
Elapsed time Logging Mode:
Raw Data Logging Mode:
Raw Data Logging Mode: ON Keep data for 3 days then purge.
Lines of code generated: 7835

Select MESSAGE Action: IGNORE (in IN basket)//
```

Expert System Inquire

This option lets you display the components that make up the rules that control order checking and notifications.

```
1
          Compile Rules
   2
          Expert System Rule Activate/Inactivate
   3
          Edit Site Local Terms
          Expert System Inquire
Select Order Check Expert System Main Menu Option: 4 Expert System Inquire
                          Expert System Display
                  Display a Rule
                  Display an Element
                  Display a Data Field
Option List -> Element, Field, Rule
Choose an Option: R
Select ORDER CHECK RULE NAME: ?
Answer with ORDER CHECK RULE NAME
Do you want the entire 38-Entry ORDER CHECK RULE List? Y (Yes)
Choose from:
  ABNORMAL LAB RESULTS
   ALLERGY - CONTRAST MEDIA REACTION
  AMINOGLYCOSIDE ORDER
   BIOCHEM ABNORMALITIES/CONTRAST MEDIA CHECK
   CLOZAPINE
  CONCURRENT LAB ORDERS FOR ANGIOGRAM, CATH - PERIPHERAL
  CONSULT/REQUEST CANCELED/HELD
                                     ***INACTIVE
                                  ***INACTIVE
   CONSULT/REQUEST RESOLUTION
   CREATININE CLEARANCE ESTIMATION
   CRITICAL HIGH LAB RESULTS
   CRITICAL LOW LAB RESULTS
   CT OR MRI PHYSICAL LIMIT CHECK
   FOOD/DRUG INTERACTION
   GLUCOPHAGE - CONTRAST MEDIA
   IMAGING REQUEST CANCELLED/HELD
   LAB ORDER CANCELLED
   LAB RESULTS
  NEW ORDER PLACED
   NPO DIET FOR MORE THAN 72 HOURS
                                        ***INACTIVE
   ORDER FLAGGED FOR CLARIFICATION
   ORDER REQUIRES CHART SIGNATURE
   ORDER REQUIRES CO-SIGNATURE
   ORDER REQUIRES ELECTRONIC SIGNATURE
   ORDERABLE ITEM MESSAGE
   ORDERER FLAGGED RESULTS AVAILABLE
   PATIENT ADMISSION
   PATIENT DISCHARGE
   PATIENT TRANSFERRED FROM PSYCHIATRY TO ANOTHER UNIT
   POLYPHARMACY
  RECENT BARIUM STUDY
  RECENT CHOLECYSTOGRAM ORDER
   RENAL FUNCTIONS OVER AGE 65 CHECK
   SERVICE ORDER REQUIRES CHART SIGNATURE
   SITE FLAGGED ORDER
   SITE FLAGGED RESULT
```

Order Check Expert System, cont'd

```
STAT ORDER PLACED
  STAT RESULTS AVAILABLE
                    ***INACTIVE
   ZZ TEST RULE
Select ORDER CHECK RULE NAME: L
        LAB ORDER CANCELLED
    1
     2
        LAB RESULTS
CHOOSE 1-2: 2
DEVICE: HOME// <Enter> ALPHA
Rule: LAB RESULTS (ACTIVE Status)
Rule Element Label: HL7 LAB RESULTS
              Element: HL7 FINAL LAB RESULT
     Event-Element Name: HL7 FINAL LAB RESULT
               Data Context: GENERIC HL7 MESSAGE ARRAY
           Compiled Routine:
              Expression #3: IF
                                 |CONTROL CODE | EQUALS ELEMENT IN SET'RE'
              Expression #4: IF
                                  FILLER | STARTS WITH 'LR'
              Expression #5: IF
                                 REQUEST STATUS (OBR) | EQ FREE TEXT'F'
          Data Field Name: CONTROL CODE
             Abbreviation:
             Data Context: GENERIC HL7 MESSAGE ARRAY
               Metadictionary Link: PATIENT.HL7_CONTROL_CODE
                         Attribute: HL7 CONTROL CODE
                         Data Type: FREE TEXT
                          OCXO VARIABLE NAME: OCXODATA("ORC",1)
                  OCXO UP-ARROW PIECE NUMBER: 1
                      OCXO DATA DRIVE SOURCE: HL7
          Data Field Name: FILLER
             Abbreviation: FILL
             Data Context: GENERIC HL7 MESSAGE ARRAY
               Metadictionary Link: PATIENT.HL7_FILLER
                         Attribute: HL7 FILLER
                         Data Type: FREE TEXT
                  OCXO UP-ARROW PIECE NUMBER: 2
                          OCXO VARIABLE NAME: OCXODATA("ORC",3)
                      OCXO DATA DRIVE SOURCE: HL7
          Data Field Name: REQUEST STATUS (OBR)
             Abbreviation:
             Data Context: GENERIC HL7 MESSAGE ARRAY
               Metadictionary Link: PATIENT.HL7_REQUEST_STATUS
                         Attribute: REQUEST STATUS
                         Data Type: FREE TEXT
                          OCXO VARIABLE NAME: OCXODATA("OBR", 25)
                  OCXO UP-ARROW PIECE NUMBER: 1
                      OCXO DATA DRIVE SOURCE: HL7
Relation Expression: HL7 LAB RESULTS
           Notification: LAB RESULTS
  Notification Message: Lab results: | ORDERABLE ITEM NAME |
     Data Field Name: ORDERABLE ITEM NAME
        Abbreviation:
        Data Context: DATABASE LOOKUP
```

Order Check Expert System, cont'd

2. ORMTIME and Job Tasking

ORMTIME is a background processor that is used in conjunction with the ORTASK routines to manage background jobs for order processing. They are intended for IRMS only.

ORMTIME is automatically scheduled once the Orders conversion is done. REQUEUE^ORMTIME is called from CLEANUP^OR3CONV1, which occurs when the conversion completes.

The following notifications/alerts are triggered via ORMTIME. If ORMTIME is not running/queued, they will not be sent.

DNR Expiring
Medications Expiring
NPO Diet > 72 Hours
Unverified Medication Order
Unverified Order

ORMTIME Main Menu [ORMTIME MAIN]

This menu contains options that are used for managing ORMTIME. **NOTE**: As of 12/98, these options are not exported.

Option	Name	Description
Reschedule	ORMTIME REQUEUE	Use this opton to Queue or Requeue
Background Processor	BACKGROUND JOB	ORMTIME. It is safe to run this option if
		ORMTIME is already queued. There is a
		check in the queueing code to see if the job
		is already queued and will not queue another
		if it finds one already there.
Get Background Job	ORMTIME	This option gives a status report of when
Status	BACKGROUND JOB	ORMTIME last ran and also indicates when
	STATUS	it is next scheduled to run. It also indicates
		when each of the seven ORMTIME failsafe
		jobs are supposed to run.
Kill all ORMTIME	ORMTIME KILL ALL	This option is used to stop ORMTIME and
Taskman Tasks	TASKS	all of its failsafe jobs. BE VERY CAREFUL
		WITH THIS OPTION. There are several
		Expert System purges that depend on
		ORMTIME and if ORMTIME is not running
		then the Expert System will eventually fill
		up the Volume Set it resides in.

ORTASK Routines

Schedule the following tasks, as appropriate for your site:

Routine	Name	Description
ORTASK 24HR	Task 24hr Chart Copy	run routine
CHART COPIES	Print by Location	
ORTASK 24HR	Task 24hr Chart Copy	run routine
SUMMARY	Print by Location	

Example

```
Select Taskman Management Option: schedule/Unschedule Options
Select OPTION to schedule or reschedule: ortask 24HR CHART COPIES
Task 24hr Chart Copy Print by Location
                                             run routine
         ...OK? Yes// <Enter> (Yes)
Edit Option Schedule
   Option Name: ORTASK 24HR CHART COPIES
   Menu Text: Task 24hr Chart Copy Print by Lo
                                                      TASK ID: 385010
 QUEUED TO RUN AT WHAT TIME: OCT 18,1997@00:05
DEVICE FOR QUEUED JOB OUTPUT: WORK; P-DOC132; 132; 64
QUEUED TO RUN ON VOLUME SET:
     RESCHEDULING FREQUENCY: 1D
            TASK PARAMETERS:
           SPECIAL QUEUEING:
COMMAND:
                                           Press <PF1>H for help
                                                                   Insert
```

3. CPRS Clean-up Utilities

Lab-OE/RR Inconsistency Checker

Check Lab orders from file 100 to 69 [ORE LAB ORDERS CHECK 100=>69]

This option does a number of consistency checks between OE/RR's Order file (100) and Lab's Order file (69). It was originally developed as a programmer's utility to check the integrity of data between the two applications. Later, code was added to correct the inconsistencies. It has proved useful to sites in troubleshooting and correcting problems. Some of the problems, such as incorrect status updates, have been occurring since the previous version of OE/RR. Other problems happen as a result of system crashes or errors during the ordering process.

This option gathers information without making any changes to the database. It takes a long time to run—several hours to several days—depending on the size of the global, so it would be best to run this at night or on the weekend.

The program starts by looping through all the entries in the Orders file (100). It checks to make sure that required global nodes are present. If the nodes are unrecognized or beyond repair, they are simple removed, so that programs that expect this data to exist do not crash. Checks for missing or invalid pointers are made and corrected. The status of the order in the Orders file (100) is compared to the status in the Lab files and corrected if necessary. Incorrect OE/RR statuses have been a problem in the past. This option is what has been used to make things consistent.

The answers you give to several questions affect the way this option affects the database. Here are explanations of these questions:

- 1. Any problems will be displayed. Continue? This question allows the user to get out of the option before doing anything, after reviewing the help text.
- 2. Check for CPRS orders that no longer exist in the Lab Order file? Answering YES to this question causes the links between OE/RR and Lab to be checked. If the link is gone, and the order has not gone to completion or has been cancelled, then the order's status is changed to cancelled. Answering NO leaves the status alone.
- 3. Do you want to remove old PENDING, ACTIVE and UNRELEASED orders? Answering YES to this question affects orders with a status of pending, active, and unreleased, that also have a start date in the past. The user gets to pick how far back to start looking for those start dates. Old Unreleased orders are removed from the system. Old pending orders are changed to a Lapsed status, which will remove them from the current orders context. Active orders that no longer have corresponding entries in the lab files are changed to a status of Lapsed.
- 4. OK, which ORIFN do you want to start with: 0//

This question allows you to select a starting point in the Orders file (100) to begin checking. ORIFN is the internal entry number in file 100 to start with [^OR(100,ORIFN)]. This is useful if you only want to check entries recently added to the file. For example, you might suspect a recent patch might have affected the way a status is updated in OE/RR files. You

could find a starting point in file 100 about the same time the patch was installed and start checking orders from that point. Looking at the 3rd '^' piece of the global ^OR(100,0) will give you the last entry in file 100.

5. Do you want me to correct the inconsistencies now?

Answering YES to this question will correct any problems that can be corrected. Answering NO will not correct the problem, but it will display a message when a problem is found.

At the end of the report, any problems found will be totaled and displayed.

If you have never run this option, it should be done at your earliest convenience. After that, it can be run as often as once a month or as little as once a year, unless otherwise instructed. If your site is journaling the ^OR global and you have not run this option for a very long time, special precautions may need to be taken. Most of the corrections are status updates. A status update would make approximately three entries in a journal file. To get an idea of the total impact on the journal, run this option once without correcting the inconsistencies, take the total number of inconsistencies, and multiply by three. This should give you a general idea of how many sets and kills will be added to the journal; then you can adjust the journal space accordingly.

Example

```
Select CPRS Manager Menu Option: IR CPRS Configuration (IRM)
OC
       Order Check Expert System Main Menu ...
          CPRS Clean-up Utilities ...
Select CPRS Configuration (IRM) Option: UT CPRS Clean-up Utilities
       Lab Order Checks ...
T. A
Select CPRS Clean-up Utilities Option: LA Lab Order Checks
          Check Lab orders from file 69 to 100
             **> Out of order: UNDER CONSTRUCTION
          Check Lab orders from file 100 to 69
Select Lab Order Checks Option: 2 Check Lab orders from file 100 to 69
This utility will look for inconsistencies between OE/RR 3.0 and Lab files.
It will compare records in the Orders file (100) with the Lab Order file
(69).
Problems identified
                                                     Resolution
^OR(100,IFN,0) does not exist
                                                     ^OR(100,IFN) killed
Bad pointers on child orders
                                                     Pointers removed
Child orders with no parent order
                                                     Pointer removed
Child order missing parent pointer
                                                     Pointer restored
Incorrect status on parent order
                                                     Status corrected
Old veiled orders
                                                     Purged
Unrecognized pointer to file 69
                                                     Order cancelled
Unconverted orders from OE/RR 2.5
                                                     Order lapsed
Invalid pointer to file 69
                                                     Order cancelled
```

CPRS Clean-up Utilities, cont'd

```
Incorrect status on uncollected specimens
                                                     Status updated
Incorrect status on completed orders
                                                     Status updated
Missing reference to file 69
                                                     Cancelled (optional)
Old pending, active & unreleased orders
                                                     Status changed
Any problems will be displayed. Continue? No// Y (Yes)
Check for CPRS orders that no longer exist in the Lab Order file? No// Y
(Yes)
Do you want to remove old PENDING, ACTIVE and UNRELEASED orders? No// ?
Unreleased orders are removed from the system.
Old pending orders are changed to a Lapsed status, which will
remove them from the current orders context.
Active orders that no longer have corresponding entries in the lab files
are changed to Lapsed
Do you want to remove old PENDING, ACTIVE and UNRELEASED orders? No// Y
(Yes)
Remove old orders with Start dates before: T-30// <Enter> (AUG 29, 1998)
Do you want me to correct the inconsistencies now? No// Y (Yes)p
2.2=>GLUCOSE BLOOD S<2961022.115121>6<Didn't get converted, NOT IN 69
5.2=>DIGOXIN BLOOD S<2961022.131419>6<Didn't get converted, NOT IN 69
12.2=>DIGOXIN BLOOD S<2961029.154314>6<Didn't get converted, NOT IN 69
         {Profile} B<2961031.164613>6<Didn't get converted, NOT IN 69
24.2=>COAGULATION (PT<2961031.164613>6<Didn't get converted, NOT IN 69
32.2=>COAGULATION (PT<2961101.095846>6<Didn't get converted, NOT IN 69
34.2=>SMAC (CHEM 20) <2961101.101734>6<Didn't get converted, NOT IN 69
37.2=>COAGULATION (PT<2961101.101814>6<Didn't get converted, NOT IN 69
89.1=>CHOLESTEROL BLO<2941129.154843>6<Didn't get converted, NOT IN 69
90.1=>GLUCOSE BLOOD S<2941129.154843>6<Didn't get converted, NOT IN 69
91.1=>HDL BLOOD SERUM<2941129.154843>6<Didn't get converted, NOT IN 69
96.1=>CHOLESTEROL BLO<2941129.155258>6<Didn't get converted, NOT IN 69
97.1=>GLUCOSE BLOOD S<2941129.155258>6<Didn't get converted, NOT IN 69
101.1=>TRANSFUSION REQ<2950120.120443>6<Status should be Complete
102.1=>TRANSFUSION REQ<2950120.125307>6<Status should be Complete
178=>OCCULT BLOOD (S<2911120.0936>5<Status should be Complete
277=>CHOLESTEROL BLO<2911120.154>5<Status should be Complete
278=>GLUCOSE BLOOD S<2911120.154>5<Status should be Complete
281=>GLUCOSE BLOOD S<2911121.1127>5<Status should be Complete
304=>TRANSFUSION REQ<2931217.1327>5<Status should be Complete
306=>Consult to PULM<><No package defined
307=>Consult to PULM<><No package defined
308=>Consult to PULM<><No package defined
309=>Consult to PULM<><No package defined
310=>Consult to PULM<><No package defined
311=>Consult to PULM<><No package defined
394=>CHEM 7 BLOOD SE<2980317.142517>6<Status should be Complete
409=>CO2 BLOOD SERUM<2980317.142527>6<Status should be Complete
445=>TRANSFUSION REQ<2980317.144511>6<Status should be Complete
472=>CO2 BLOOD SERUM<2980611.120016>6<Status should be Complete
560=>GLUCOSE BLOOD S<2980616.142934>6<Status should be Complete
Total inconsistencies: 221
Old Pending orders total: 185
Old Unreleased orders total: 5
Unconverted 2.5 orders total: 13
Status should be complete: 12
```

4. General Parameter Tools

Options on this menu let you display or edit the values for selected parameters, entities, packages, and templates. You can also create Add Orders menus or add order menus to the orders list in the GUI.

The Parameter File (8989.1) has four fields:

Entity The person, place, or thing the parameter is being defined for

Parameter The definition of this particular parameter Instance For multi-division or integrated sites Value What you define or set for this parameter

Name	Text	Definition
XPAR LIST BY PARAM	List Values for a Selected Parameter	This option prompts for a parameter (defined in the PARAMETER DEFINITION file) and lists all value instances for that parameter.
XPAR LIST BY ENTITY	List Values for a Selected Entity	This option prompts for the entry of an entity (location, user, etc.) and lists all value instances for that entity.
XPAR LIST BY PACKAGE	List Values for a Selected Package	This option prompts for a package and lists all parameter values for the selected package.
XPAR LIST BY TEMPLATE	List Values for a Selected Template	This option prompts for a parameter template. Depending on the definition of the template, additional information may be prompted for and then the parameter values defined by the template are displayed.
XPAR EDIT PARAMETER	Edit Parameter Values	The option calls the low level parameter editor, which allows you to edit the values for every parameter. Normally packages supply other means of editing parameters.
XPAR EDIT BY TEMPLATE	Edit Parameter Values with Template	This option prompts for a Parameter Template and then uses the selected template to edit parameter values.

List Values for a Selected Parameter

```
Select CPRS Configuration (IRM) Option: XX General Parameter Tools
          List Values for a Selected Parameter
          List Values for a Selected Entity
   _{
m LE}
   LΡ
          List Values for a Selected Package
          List Values for a Selected Template
   LT
   EΡ
          Edit Parameter Values
   ET
          Edit Parameter Values with Template
Select General Parameter Tools Option: LV List Values for a Selected
Select PARAMETER DEFINITION NAME: ORPF SERVICE COPY FORMAT
                                                                      Service
Copy Format
Values for ORPF SERVICE COPY FORMAT
SYS: OEX.ISC-SLC.VA.GOV
                               PHARMACY
                                                       DOCTOR'S ORDERS
                             LAB SERVICE DOCTOR'S ORDERS
RADIOLOGY/NUCLEAR ME DOCTOR'S ORDERS
OUTDATED THAT DHARMACY DOCTOR'S ORDERS
SYS: OEX.ISC-SLC.VA.GOV
SYS: OEX.ISC-SLC.VA.GOV
                               OUTPATIENT PHARMACY DOCTOR'S ORDERS
SYS: OEX.ISC-SLC.VA.GOV
SYS: OEX.ISC-SLC.VA.GOV
                                CONSULT/REQUEST TRAC CONSULTATION BODY
SYS: OEX.ISC-SLC.VA.GOV
                               CONSULT TRACKING CONSULTATION BODY
Enter RETURN to continue or '^' to exit:
```

List Values for a Selected Template

List templates have been created for many parameters, to ensure a consistent format for displaying and editing parameters. You can view the default values or local settings for any of these templates through these options.

```
Select General Parameter Tools Option: List Values for a Selected
Template
Select PARAMETER TEMPLATE NAME: ?
  Answer with PARAMETER TEMPLATE NAME
  Do you want the entire 23-Entry PARAMETER TEMPLATE List? y (Yes)
Choose from:
          LR DOMAIN
                                                                                                                        Lab Domain Level Parameters
         LR LOC
                                                                                                                        Lab Location Level Parameters
     Chart Copy Definition

ORP ORDER MISC

ORP PRINTS (HOSP)

ORP PRINTS (LOC)

ORP REQUISITIONS/LABELS

ORP SERVICE COPY

ORP SUMMARY REPORTS

ORP WORK COPY

ORQQ SEARCH RANGE (DIVISION)

ORQQ SEARCH RANGE (SERVICE)

ORQQ SEARCH RANGE (SYSTEM)

ORQQ SEARCH RANGE (USER)

XPAR TEST Z

XPAR TEST TEMPLATE

ZZORQQ SEARCH RANGE (DIVISION)

ORP ORDER MISC

Miscellaneous OE/RR Definition

Miscellaneous Hospital Prints

Print Definition (Loc)

Requisition/Label Definition

Service Copy Definition

ORDER WORK COPY

Work Copy Definition

GUI Cover Sheet - Division

GUI Cover Sheet - Division

GUI Cover Sheet - Service

GUI Cover Sheet - System

ORQQ SEARCH RANGE (USER)

GUI Cover Sheet - User

TEST 2

Parameter Tools Test Template
         LR PKG
                                                                                                                       Lab Package Level Parameters
        XPAR TEST TEMPLATE

ZZORQQ SEARCH RANGE (DIVISION)

ZZORQQ SEARCH RANGE (LOCATION)

ZZORQQ SEARCH RANGE (SERVICE)

ZZORQQ SEARCH RANGE (SERVICE)

ZZORQQ SEARCH RANGE (SYSTEM)

ZZTEST

GUI Cover Sheet - System

GUI Cover Sheet Display Date

GUI Cover Sheet Display Date

GUI Cover Sheet Display Date

GUI Cover Sheet Display Date

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GUI Cover 
                                                                                                                     GUI Cover Sheet Display Parm U
Select PARAMETER TEMPLATE NAME: ORP ORDER MISC
                                                                                                                                                                            Miscellaneous
OE/RR Definition
Miscellaneous OE/RR Definition for System: OEX.ISC-SLC.VA.GOV
______
Active Orders Context Hours
                                                                                                                                                                        24
Auto Unflag
                                                                                                                                                                       YES
Confirm Provider
                                                                                                                                                                       YES (Exclude ORES)
Default Provider
                                                                                                                                                                       YES
Error Days
                                                                                                                                                                       2.
Grace Days before Purge
                                                                                                                                                                       30
Restrict Requestor
                                                                                                                                                                       YES (ORELSE &
OREMAS)
Review on Patient Movement
                                                                                                                                                                       YES
Show Status Description
                                                                                                                                                                       YES
Signed on Chart Default
                                                                                                                                                                      NO
______
Enter RETURN to continue or '^' to exit:
```

Disabling Ordering per User

You can use *General Parameter Tools* to disable ordering for individual users, if you have access to this option; otherwise, get an IRMS specialist to help you.

```
Select OPTION NAME: ORMGR
                                    CPRS Manager Menu
                                                           menu
          Clinician Menu ...
   NM
          Nurse Menu ...
   WC
          Ward Clerk Menu ...
   PΕ
          CPRS Configuration (Clin Coord) ...
          CPRS Configuration (IRM) ...
   IR
Select CPRS Manager Menu Option: IR CPRS Configuration (IRM)
   OC
          Order Check Expert System Main Menu ...
   ΤI
          ORMTIME Main Menu ...
   UT
          CPRS Clean-up Utilities ...
          General Parameter Tools ...
   XX
Select CPRS Configuration (IRM) Option: XX General Parameter Tools
          List Values for a Selected Parameter
  LV
          List Values for a Selected Entity
   _{
m LE}
          List Values for a Selected Package
   _{\rm LP}
   LT
          List Values for a Selected Template
   EΡ
          Edit Parameter Values
   ET
          Edit Parameter Values with Template
 Select General Parameter Tools Option: EP Edit Parameter Values
Select PARAMETER DEFINITION NAME: ORWOR DISABLE ORDERING
                                                              Disable
Ordering in GUI
ORWOR DISABLE ORDERING may be set for the following:
         User
                       USR
                               [choose from NEW PERSON]
                       SYS
                               [OEX.ISC-SLC.VA.GOV]
         System
     10 Package
                       PKG
                               [ORDER ENTRY/RESULTS REPORTING]
Enter selection: 2 User
                           NEW PERSON
                                                              COMPUTER TYPE
Select NEW PERSON NAME: FROMMATER, RANDY
                                                 RAF
--- Setting ORWOR DISABLE ORDERING for User: FROMMATER, RANDY----
Disable Ordering: ?
Enter 'Yes' if you wish to disable ordering and order action in the GUI.
Disable Ordering: YES
ORWOR DISABLE ORDERING may be set for the following:
     2
         User
                       USR
                               [choose from NEW PERSON]
     5
         System
                       SYS
                               [OEX.ISC-SLC.VA.GOV]
     10
                               [ORDER ENTRY/RESULTS REPORTING]
        Package
                       PKG
This will disable all BUT NEW PROBLEM, NEW NOTE, and NEW DISCHARGE SUMMARY
```

Creating or adding to the Write Orders list

The parameters that control the "Write Orders" list are edited via the General Parameter Tools menu (XPAR MENU TOOLS).

Using General Parameter Tools on the CPRS Configuration menu (IRM)

- 1. Use the *List Values for a Selected Parameter* option to see how the parameter for the write orders list is exported (the package level of the parameter ORWOR WRITE ORDERS LIST).
- 2. Use Edit Parameter Values, select ORWOR WRITE ORDERS LIST.
- 3. Select "System" to enter the dialogs and menus that you want to appear in the list at your site.

Using Order Menu Management - *Enter/edit order menus* on the CPRS configuration menu (Clin Coord).

- Create a new menu. Remember, this menu will be what shows up in the list box on the left side
 of the orders tab, so it should be a single column. You can put what you want in this list. The
 idea was that it would contain the most common ordering menus and dialogs to which a user
 needs access.
- 2. After creating the menu, use *Edit Parameter Values* and select ORWDX WRITE ORDERS LIST as the parameter.
- 3. Select "System" and enter the menu you just created as the value. You can override by exception what you set for the system level by setting the parameter for a particular division or user. The ORWDX WRITE ORDERS LIST parameter takes precedence over the ORWOR WRITE ORDERS LIST parameter, if both are present.

You can find what was on the "Write Orders" list to start with by using the parameter tools menu (XPAR MENU TOOLS), selecting List Values for a selected parameter, and entering ORWOR WRITE ORDERS LIST as the parameter. The exported list will be preceded by PKG. If the list has been modified at your site, each item will be preceded by SYS. If a list has been set up for a specific user, it will be preceded by USR.

The "Write Orders" list, as exported, contains the following dialogs:

Sequence	Value	Display Name
30	FHW1	Diet
52	PSJ OR PAT OE	Meds, Inpatient
55	PSO OERR	Meds, Outpatient
58	PSJI OR PAT FLUID OE	IV Fluids
60	LR OTHER LAB TESTS	Lab Tests
70	RA OERR EXAM	Radiology
80	GMRCOR CONSULT	Consult
85	GMRCOR REQUEST	Procedure
90	GMRVOR	Vitals
99	OR GXTEXT WORD PROCESSING ORDER	Text Only Order

The sequence is just an arbitrary number to indicate the order that the dialog should be in the list.

```
Select OPTION NAME: ORMGR
                                   CPRS Manager Menu
                                                          menu
          Clinician Menu ...
         Nurse Menu ...
  NM
         Ward Clerk Menu ...
  WC.
         CPRS Configuration (Clin Coord) ...
  PF.
         CPRS Configuration (IRM) ...
Select CPRS Manager Menu Option: IR CPRS Configuration (IRM)
          Order Check Expert System Main Menu ...
         ORMTIME Main Menu ..
  ΤI
          CPRS Clean-up Utilities ...
  TTT
  XX
         General Parameter Tools ...
Select CPRS Configuration (IRM) Option: XX General Parameter Tools
         List Values for a Selected Parameter
  LE
         List Values for a Selected Entity
         List Values for a Selected Package
  LΡ
         List Values for a Selected Template
  T.T
  EΡ
          Edit Parameter Values
         Edit Parameter Values with Template
Select General Parameter Tools Option: EP Edit Parameter Values
                        --- Edit Parameter Values ---
Select PARAMETER DEFINITION NAME: ORWDX WRITE ORDERS LIST
                                                           Menu for Write
Orders List
ORWDX WRITE ORDERS LIST may be set for the following:
                      USR
                              [choose from NEW PERSON]
        Division
                      DIV
                              [REGION 5]
                              [OEX.ISC-SLC.VA.GOV]
     8
        System
                      SYS
Enter selection: 2 User NEW PERSON
Select NEW PERSON NAME: GREEN, JOANN
------ Setting ORWDX WRITE ORDERS LIST for User: GREEN,JOANN -------
Order Dialog: ??
Choose from:
  FHWMENU
  GMRVORMENU
  OR ADD MENU CLINICIAN
  OR GMENU ACTIVITY ORDERS
  OR GMENU ORDER SETS
  OR GMENU OTHER ORDERS
  OR GMENU PATIENT CARE ORDERS
  OR GXMOVE PATIENT MOVEMENT
  ORZ WHATEVER
  ZZCURTIS
  ZZJFR MENU
  ZZJFR TEST MENU
  ZZKCM MENU
   ZZKCM MENU 1
   ZZMARCIA
   ZZMEL MENU
  ZZRV1
Order Dialog: ZZMEL MENU
```

D. Other CPRS Configuration

List Manager Terminal Setup

Check the List Manager Attributes file. You may need to update the Terminal Type file for the VT100's. If the "Insert Line" field is empty, this will cause List Manager to revert back to scroll mode.

List Manager uses 11 video attributes, which are in the Terminal Type file (#3.2). These are listed (along with recommended values) in the Site Preparation section of the *List Manager Developer's Guide* (can be found at: http://152.127.1.95/softserv/infrastr.uct/listman/docs/hh/index.html).

Attribute	Value for a VT series terminal
Form Feed	#,\$C(27,91,50,74, 27,91,72)
XY CRT	W, \$C(27,91)_((DY+1))_\$C(59)_((DX+1))_\$C(72)
Erase to End of Page	\$C(27,91,74)
Insert Line	\$C(27),"[L"
Underline On	\$C(27,91,52,109)
Underline Off	\$C(27,91, 109)
High Intensity	\$C(27,91,49,109)
Normal Intensity	\$C(27,91,109)
Save Cursor Pos	\$C(27,55)
Restore Cursor Pos	\$C(27,56)
Set Top/Bottom Marg	\$C(27,91)_(+IOTM)_\$C(59)_(+IOBM)_\$C(114)

Nature of Order File

Entries in this file determine the actions that are to be taken based on the nature of an order or change to an order.

NOTE: This file shouldn't be added to or deleted from.

Nature of Order names

WRITTEN
VERBAL
TELEPHONED
SERVICE CORRECTION
POLICY
DUPLICATE
REJECTED
PHYSICIAN ENTERED
AUTO
CHANGED
MAINTENANCE

The file is initially populated with data that seems the most appropriate. We recommend that you review the entries after CPRS is installed, and, if necessary, modify it to meet your site needs.

Example

```
>D P^DI
Select OPTION: eNTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: NATURE OF ORDER
EDIT WHICH FIELD: ALL// <Enter>
Select NATURE OF ORDER NAME: verbal
                                             ۲7
CODE: V// <Enter>
NON-INTERACTIVE: INTERACTIVE// ??
     This field identifies this entry for interactive or non-interactive
     Choose from:
      0
                INTERACTIVE
       1
               NON-INTERACTIVE
NON-INTERACTIVE: INTERACTIVE// <Enter>
INACTIVE: ??
     This field is used to inactivate a nature of order.
     Choose from:
                ACTIVE
       Ω
       1
                INACTIVE
INACTIVE: <Enter>
FRONT/BACKDOOR: both// ??
     This field is used to identify entries that are used during an OE/RR
    dialog (frontdoor), and entries that are used by ancillary services
     (backdoor).
     Choose from:
      F
                frontdoor
       В
                backdoor
      Х
                both
FRONT/BACKDOOR: both// <Enter>
```

Nature of Order File, cont'd

```
DC ONLY: NO// ?
     Enter YES if this entry is only used for DC actions.
     Choose from:
       Λ
                NO
DC ONLY: NO// <Enter>
CREATE ACTION: YES// ??
     This field determines if an entry will be created in the Order Action
     multiple for this order; if not, then only a status update will occur.
     Choose from:
       0
       1
                YES
CREATE ACTION: YES// <Enter>
PRINT CHART COPY: YES// ??
     This field determines if this entry/action should generate a Chart copy.
     Choose from:
       1
                YES
PRINT CHART COPY: YES// <Enter>
PRINT DAILY SUMMARY: YES// ??
     This field determines if this entry/action should appear on the
     Daily Order Summary.
     Choose from:
       0
                NO
                YES
       1
PRINT DAILY SUMMARY: YES// <Enter>
DEFAULT SIGNATURE STATUS: NOT SIGNED// ??
     This is the signature status that will be assigned to an order having
     this nature; if a signature is not applicable, this field should be
     null.
     Choose from:
       0
                ON CHART w/written orders
       1
                ELECTRONIC
                NOT SIGNED
       2
       3
                NOT REQUIRED
                ON CHART w/printed orders
       4
       5
                NOT REQUIRED due to cancel
                SERVICE CORRECTION to signed order
DEFAULT SIGNATURE STATUS: NOT SIGNED// <Enter>
PRINT WORK COPY: ??
     This field determines if this entry/action should generate a Work Copy.
     Choose from:
       Λ
                NΟ
       1
                YES
PRINT WORK COPY: <Enter>
Select NATURE OF ORDER NAME: <Enter>
```

E. CPRS Hardware & Software Requirements and Recommendations

The following information contains recommendations for workstations, servers, and cabling plants. These recommendations are for requirements beyond the basic upgrading of the facility's main computer cluster to the newer DEC Alpha systems to provide the additional capacity needed to run CPRS and related packages (e.g. TIU, PCMM, PDM),

VHA facilities are encouraged to budget and purchase PC workstations as replacements for dumb terminals. The VHA LAN and Workstation Requirements task force report should be used too as a guide.

NOTE: The List Manager interface, non-GUI version, of CPRS does not require a PC workstation.

Workstation Hardware

Economical configuration

- CPU: Pentium 120 MHz or 133 MHz (with upgradeable motherboard). In addition to a faster CPU, the 133 MHz CPU has a faster bus speed of 66 MHz, rather than the 60 MHz bus speed of the 120 MHz CPU.
- RAM: 16MB RAM for Windows 95, 24 or 32 MB RAM for NT Workstation. Viewing of 2K by 2K Radiology images will respond faster with 32MB, for instance.
- BUS: ISA and PCI (typically 3 16-bit ISA and 3 32-bit PCI)
- Graphics accelerator: PCI bus, SVGA 1024 x 768, 256 colors with 2MB RAM (4MB VRAM or WRAM for fast true color imaging at 1024 x 768 x 24 bit / 16.7 million colors)
- Monitor: 14 inch, multi-sync, SVGA 1024 x 768 non-interlaced, 0.28 mm or less, Energy Star compliant
- Keyboard and mouse
- Disk: 1 GB IDE hard drive
- Ports: 1 parallel, 2 serial
- Network: 32 bit, PCI bus 10/100 MBPS Fast Ethernet controller card

Higher performance

- CPU: Pentium Pro 200MHz (with upgradeable motherboard)
- RAM: 32 MB RAM
- BUS: ISA and PCI (typically 3 32-bit PCI and 3 16-bit ISA)
- Graphics accelerator: PCI bus, SVGA 1024 x 768, 256 colors with 2MB RAM (4MB VRAM or WRAM for fast true color imaging at 1024 x 768 x 24 bit / 16.7 million colors)
- *Monitor: 17 inch*, multi-sync, SVGA 1024 x 768 *non-interlaced*, 0.28 mm or less, Energy Star compliant, 75 Hz or better refresh for reduced flicker
- Keyboard and mouse
- Disk: 1.6 GB-IDE hard drive (2GB for documentors or power users)
- Ports: I parallel, 2 serial
- Network: 32 bit. PCI bus 10/100 MBPS Fast Ethernet controller card

Optional

- Optional communications: 28.8K V.34 modem.
- Optional multimedia: 16 bit sound card (Sound Blaster compatible) with speakers.
- Optional CD-ROM: 8X drive

Minimal footprint configuration.

Some ward locations have severe physical space restrictions where a minimal footprint workstation configuration is *needed*. For these situations, small physical dimension system configurations should be considered. These systems should also meet the same performance *specifications* outlined above.

Laptop Requirements

- 100MHz Pentiums, with 10MHz network cards
- 2MB video RAM
- 32 MB RAM
- 14" monitors set to 640x480

Software

Current **recommended** workstation software configuration:

- Windows operating system: MS Windows 95, or Windows NT Workstation. All sites should migrate away from Windows 3.1 or Windows for Workgroups 3.11. Microsoft's TCP/IP, FTP, Telnet bundled with Windows 95, NT Workstation, WFW 3.11
- 32 bit Application Support -bundled with Windows 95, NT Workstation. Win3.2 is free for WFW 3.11
- Broker Client Agent (if using multi-signon; otherwise, optional
- Properly configured HOSTS file

Optional

- Electronic mail: Microsoft Exchange Client
- World Wide Web browser
- Application software: such as Microsoft Office 95 or 97 (Microsoft Word, Excel, Power Point). The number, the type, and the implementation strategy of applications should be determined by the functional needs of the user(s).
- Windows development environment: Borland Delphi for Windows. Software Services selected Borland Delphi for Windows as the application development environment to be used by the CIO field Office development staff. The underlying architecture, which exchanges messages using the *VISTA* Request Broker, would permit local sites to use any compatible tool, such as Visual Basic or C++.
- Terminal emulator for Windows
- Presentation software: Microsoft Power Point
- Drawing software;
- Publishing software
- Computer-aided design and drafting (CADD).

Under evaluation.

workstation management software: functions such as those contained in MS SMS Client.

Local Area Networks

Server hardware (non *VISTA* servers)

For simplicity of support, facilities should consider purchasing the same type of hardware used for the *VISTA* servers. These systems would both run the recommended server NOS (network operating system) of Microsoft Windows NT. General features to be considered include:

- Single processor system with capacity to expand to multi-processor
- RAID magnetic disk drive configurations for critical applications
- Backup device
- Fast disk controller (SCSI-2)
- Uninterruptable power supply (UPS) with shutdown software
- Modems for RAS and system access by support personnel

Server software

- Microsoft Windows NT 3.5x or 4.x. Microsoft Windows NT has been selected as the recommended server NOS (network operating system) for non- VISTA applications within VHA
- Electronic mail: Microsoft Exchange Enterprise Version.
- VISTA Request Broker on VISTA servers
- CD ROM resources: Network versions of medical reference sources such as Physicians Data Reference
- Optional workstation management software, e.g. SMS

LAN naming conventions

LAN naming conventions are important as we maximize the benefit from our installed systems. The best trade-offs need to be made to ensure that the results are user friendly, compatible with evolving computer networking technology, and compatible with other VA organizations. Conventions are needed for objects such as user names, domains, servers, shared directories, post offices, printers, printer queues, groups, workstation computer names, login scripts, and shared resource names (FAX, modem pools, CD ROM towers). It is possible that these conventions will need to change over time. The VHA NT naming conventions documents can be found on the internal VA Intranet server under medical automation, at link *h ttp://152.128.2. 7/mediauto/domain7. doc.*

LAN architecture

The VHA Office of the Chief Information Officer (OCIO) has developed the VHA LAN Architecture for use as guidance in the implementation of a scaleable, open local area network (LAN) architecture at VHA facilities.

The key assumption underlying the design of the recommended architecture is reflected in the 1992 VHA report, DHCP Facility Data Communications Cabling Recommendations and Implementation Strategies (http://vaww. va.gov/tss/ datanetd/ttf1992, doc). The network backbone is a fiber optic implementation and the horizontal wiring is realized using three four-

pair unshielded twisted pair (UTP) category 5 cables to the workspace. Three corresponding architectures were recommended in support of the three business cases.

The crux of the recommended VAMC architecture is LAN switching realized with Ethernet, FDDI, and ultimately, ATM technologies. The augmented recommended architecture includes an alternative architecture for VA facilities with conservative demands and limited economic resources.

Facility wiring/cabling

Facility wiring and cabling recommendations are outlined in the 1992 VHA report DHCP Facility Data Communications Cabling Recommendations and Implementation Strategies (http://vaww.va.gov/tss/datanetd/tt£1992, doc), released to the field in January 1992.

Facility-wide connectivity would include a multi-mode fiber optic backbone to all wiring locations, and category 5 unshielded twisted pair (UTP) wiring to all work/user locations. Such a cabling scheme is anticipated to support any future recommendation for a LAN architecture. The VII Telecommunications Infrastructure Project (TIP) is currently underway aimed at helping sites upgrade to the appropriate cabling and LAN architecture.

IV. Set-Up for Other CPRS Packages

- A. Adverse Reaction Tracking
- B. Consult/Request Tracking
- C. Dietetics
- D. Health Summary
- E. Imaging
- F. Lab
- G. Pharmacy:

Pharmacy Data Management

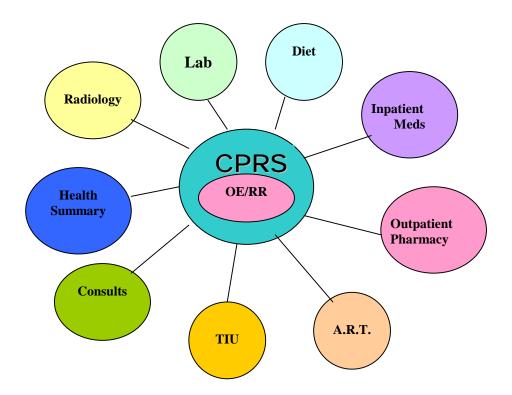
Outpatient Pharmacy

Inpatient Medications

IV

Unit Dose

H. Text Integration Utilities (TIU)



Parameters for Packages Related to CPRS

The behavior of CPRS is affected by parameters controlled by the following options in ancillary packages that interface with CPRS:

Imaging

Common Procedure Enter/Edit

Rad/NM Procedure Entry/Edit

Modifier List

Procedure Modifier Entry

Division Parameter Set-up

Location Parameter Set-up

Device Specifications for Imaging Locations

Location Parameter List

Sharing Agreement/Contract Entry/Edit

Active Procedure List (Long)

Examination Status Entry/Edit

Examination Status List

Rad/NM Diagnostic Code Enter/Edit

Diagnostic Code List

Lab

LR70 PAR DOMAIN Domain Level Parameter Edit
LR70 PAR LOC Location Level Parameter Edit
LR70 PAR PKG Package Level Parameter Edit
LR70 PARAM MENU Update CPRS Parameters

LR70 ORDER PARAMETERS Update CPRS with Lab order parameters

LR70 SINGLE LAB TEST Update CPRS with Single Lab test

LR70 ALL LAB TESTS Update CPRS with all Lab test parameters

LRACC MERG Merge Accessions

Pharmacy

Pharmacy Data Management Menu

Pharmacy/VA Generic Orderable Item Report

VA Generic Orderable Item Report

Create Pharmacy Orderable Items

Manually Match Dispense Drugs

Orderable Item Matching Status

Edit Orderable Items

Dispense Drug/Orderable Item Maintenance

Additive/Solutions, Orderable Item

Orderable Item Report

Drug Enter/Edit

Lookup into Dispense Drug File

Med Route/Instructions Table Maintenance

Med. Route/Instruction File Add/Edit

Medication Instruction File Add/Edit

Standard Schedule Edit

Electrolyte File (IV)

EnterEdit Local Drug Interaction

Edit Drug Interaction Severity

Primary Drug Edit

Edit IV Identifier

CMOP Mark/Unmark (Single drug)

Locked with PSXCMOPMGR

Outpatient Pharmacy

The system parameter, ADMISSION CANCEL OF RXS, if set to yes will discontinue med orders 72 hours after admission. The option used to determine this parameter is called Site Parameter Enter/Edit [PSO SITE PARAMETERS].

When renewing OP orders through the front door, there's a function call that is used to help determine if OP orders can be renewed.

S X=\$\$RENEW^PSORENW(ORIFN). Returned X=-1,1 or 0_"^"_reason (-1=invalid order, 1=renewable, 0=not renewable).

Maintenance (Outpatient Pharmacy) Menu

Site Parameter Enter/Edit

Edit Provider

Add New Providers

Queue Background Jobs

Autocancel Rx's on Admission

Bingo Board Manager ...

Edit Data for a Patient in the Clozapine Program

Enter/Edit Clinic Sort Groups

Initialize Rx Cost Statistics

Edit Pharmacy Intervention

Delete Intervention

Auto-delete from Suspense

Delete a Prescription

Expire Prescriptions

Purge Drug Cost Data

Purge External Batches

Recompile AMIS Data

Parameters for Packages Related to CPRS, cont'd

Inpatient Meds

Options

Auto-Discontinue Set-Up (to auto-discontinue patients' orders whenever patients are transferred between wards, services, or to Authorized or Unauthorized Absence)

Inpatient Ward Parameters Edit (to edit MAR Parameters)

Site Parameters (IV)

Files

Inpatient Meds uses the following fields from the Pharmacy System file (^PS(59.7)):

NON-FORMULARY MESSAGE: This is a message that will be shown to non-pharmacists when they order patient drugs that are not currently stocked by the pharmacy. This is typically a warning and/or a procedure the non-pharmacist must follow before pharmacy will dispense the non-formulary drug.

ALLOW THE CHANGE OF ORDER TYPES ON ORDERS FROM OERR: This field is a site parameter that will allow the pharmacist to change the type of order from what is received from CPRS. If this field is set to yes, it will be possible to change the order type on orders where the Orderable Item has data in the CORRESPONDING IV ITEM field for unit dose orders or data in the CORRESPONDING UD ITEM for IV orders.

IV IDENTIFIER: This is a free-text field that can be up to 30 characters. If the Orderable Item is marked for IV usage, this text will display next to the Orderable Item to distinguish a Unit dose from an IV drug.

These fields can be accessed through the *Systems Parameters Edit* [PSJ SYS EDIT] option.

Text Integration Utilities (TIU) and Authorization/Subscription Utility (ASU)

TIU Maintenance Menu {TIU IRM MAINTENANCE MENU}

TIU Parameters Menu...[TIU SET-UP MENU]

Basic TIU Parameters [TIU BASIC PARAMETER EDIT]

Modify Upload Parameters [TIU UPLOAD PARAMETER EDIT]

Document Parameter Edit [TIU DOCUMENT PARAMETER EDIT]

Document Definitions (Manager)...[TIUF DOCUMENT DEFINITION MGR]

Edit Document Definitions [TIUFH EDIT DDEFS MGR]

Create Objects [TIUFJ CREATE OBJECTS MGR]

User Class Management ... [USR CLASS MANAGEMENT MENU]

User Class Definition [USR CLASS DEFINITION]

Edit Business Rules [USR EDIT BUSINESS RULES]

Manage Business Rules [USR MANAGE BUSINESS RULES]

A. Adverse Reaction Tracking (ART)

Adverse Reaction Tracking (ART) doesn't require any set-up for CPRS.

Patch GMRA*4*4 contains interface routines and fixes to the CPRS/ART interface. It needs to be installed before CPRS.

B. Patient Movement

The Bed Control (Admission, Discharge, and Transfer) package doesn't require any special set-up or have any special options for setting parameters for CPRS. However, Bed Control options can be used by other packages to tie their various events to the MAS events. These package events are processed after the DGPM MOVEMENT EVENTS option has been completed.

■ Review and assign sequence numbers to protocols in the DGPM Movement Events field of the Protocol file.

All protocols in this ITEM field of the PROTOCOL file must be sequenced before the OR protocols.

Most of the necessary movement event protocols are automatically assigned during the CPRS installation. Make sure the following CPRS protocols are in the DGPM Movement Events field, in a sequence similar to the following:

ITEM:	DGOERR NOTE	SEQUENCE: 13 (this should have the
		lowest sequence #)
ITEM:	FHWMAS	SEQUENCE: 14
ITEM:	LR70 MOVEMENT EVENT	SEQUENCE: 15
ITEM:	OCX ORDER CHECK PATIENT MOVE	SEQUENCE: 16
ITEM:	PSJ OR PAT ADT	SEQUENCE: 19
ITEM:	ORU AUTOLIST	SEQUENCE: 21
ITEM:	ORU REVIEW DELAYED ORDERS	SEQUENCE: 22
ITEM:	ORU PATIENT MOVMT	SEQUENCE: 100
ITEM:	OR GUA EVENT PROCESSOR NOTASK	SEQUENCE: 999 (this should have the
		highest sequence #)

Example: Entering a protocol sequence # for DGPM MOVEMENT EVENTS

```
Select OPTION: ENTER OR EDIT FILE ENTRIES
            INPUT TO WHAT FILE: OPTION// 101 PROTOCOL
                                                           (3374 entries)
            EDIT WHICH FIELD: ALL// ITEM
               EDIT WHICH ITEM SUB-FIELD: ALL// <Enter>
            THEN EDIT FIELD: <Enter>
            Select PROTOCOL NAME: DGPM MOVEMENT EVENTS
                                                                MOVEMENT EVENTS v 5.0
 This #
           Select ITEM: DGOERR NOTE
               ITEM: DGOERR NOTE// <Enter>
should be
               MNEMONIC: <Enter>
less than
               SEQUENCE: 69// 13
 all OR*
               MODIFYING ACTION: ^
  item
             Select ITEM: <Enter>
sequences
```

DGPM Movement Events

At the completion of a patient movement, the following events take place through this option:

- 1. The PTF record is updated when a patient is admitted, discharged, or transferred.
- 2. The appointment status for a patient is updated to "inpatient" for admissions and "outpatient" for discharges. Admissions to the domiciliary have an "outpatient" appointment status.
- 3. When a patient is admitted, dietetics creates a dietetic patient file entry and creates an admission diet order. When a patient is discharged, all active diet orders are discontinued. If a patient is absent or on pass, the diet orders are suspended.
- 4. Inpatient pharmacy cancels all active orders when a patient is admitted, discharged, or on unauthorized absence. A patient can't be given Unit Dose meds unless s/he is admitted to a ward. The patient can receive IV meds, however. When a patient is transferred, an inpatient system parameter is used to determine whether or not the orders should be cancelled. When a patient goes on authorized absence, the inpatient system parameter is used to determine whether the orders should be cancelled, placed on hold, or no action taken. When a patient returns from authorized absence, any orders placed on hold will no longer be on hold.
- 5. Orders for a patient may be reviewed for further action by the user.
- 6. MAS notifications may be displayed to users defined in a CPRS list for that patient. These notifications are displayed for admissions, deaths, and discharges.

Protocols hooked to MAS Event Driver in File 101

Name	Type
DGPM MOVEMENT EVENTS	X
DGPM TREATING SPECIALTY EVENT	X
SD APPT STATUS	X
DGJ INCOMPLETE EVENT	X
DGOERR NOTE	X
FHWMAS	X
PSJ OR PAT ADT	A
ORU PATIENT MOVEMENT	A

C. Consult/Request Tracking

See the Consult/Request Tracking V. 3.0 Technical Manual for complete details on implementing and maintaining the package.

See the TIU section in this manual for instructions on setting up the TIU/Consults/CPRS interface.

Patch GMRC*2.5*17

All sites running v2.5 of Consult/Request Tracking must install this patch prior to installing CPRS v1.0. This patch can be loaded anytime prior to the CPRS v1.0 installation at your site but it is recommended that you load it just prior to installing CPRS v1.0. If you create a new GMRCR protocol after installing this patch you must reinstall the patch. Installing the patch multiple times does not cause any problems. The CPRS v1.0 installation includes Consult/Request Tracking v3.0.

NOTE: Since this patch was created after the CPRS v1.0 build, the environment checks for CPRS v1.0 and Consult/Request Tracking v3.0 do not check to see that this patch has been installed prior to the CPRS v1.0 install.

Service and Specialty Hierarchy

If your site has set up a Service and Specialty hierarchy through version 2.5, this is converted with the installation of CPRS.

The Request Services file (#123.5) is distributed with a small selection of services. The hierarchical relationships are not in place upon distribution.

The small selection of services distributed with the package should not be deleted from the Request Services file (#123.5) under any circumstances. You may delete locally defined services and their associated hierarchies until the services are selected for ordering consults. Once the ordering process has begun **DO NOT DELETE** a service entry. Instead, disable the service using the SERVICE USAGE field in file 123.5. Disabled services are not selectable for ordering or tracking.

The Service/Specialty hierarchy you define can be as complex as needed to meet service requirements at your site. To get started you will probably want to specify a small subset of services/specialties and add to them over a period of time. ALL SERVICES needs to be the top entry in the hierarchy.

In order to build the service hierarchy, you will need to know how the service entry in the Request Services file (#123.5) will be used. Some services will be used as a GROUPER ONLY and other services may be used for TRACKING ONLY. The

SERVICE USAGE field is provided for you to differentiate the services in the hierarchy.

To see your site's hierarchy, use the Consults Service Tracking [GMRC SERVICE TRACKING] option and enter ?? at the "Select Service/Specialty:"

SNOTE For the Consults tab of CPRS to function properly, any new service added to the hierarchy must be made a sub-service of ALL SERVICES!!

> If the service is not directly placed under the ALL SERVICES heading, it must be a sub-service of a service that IS under ALL SERVICES. If a service is not in the hierarchy under the ALL SERVICES heading, users will not be able to view or respond to the consult from the consults tab in CPRS after it has been sent.

Sample Hierarchy

ALL SERVICES

REHAB MEDICINE (GROUPER) PHYSICAL MEDICINE & REHABILITATION OCCUPATIONAL THERAPY (TRACKER) KENESIOTHERAPY (TRACKER) PHYSICAL THERAPY (TRACKER) MEDICINE (GROUPER)

CARDIOLOGY ALLERGY/IMMUNOLOGY GI INFECTIOUS DISEASE

Each hospital service or primary care team should work with the IRMS staff and its Clinical Coordinator to define its service and specialty hierarchy, who the users will be, and the types of consults that are orderable from its specialties. Service users may range from clerks to nurses, pharmacists, clinical technicians, physicians, and other types of clinicians.

Plan every detail of your site's consult hierarchy before ever trying to do the setup in production. It is critical not only to draw your entire hierarchy out on paper so that all tiers are perfectly clear, but also to speak with every service involved so that the correct users and hardware are identified at the time of the Setup. Doing this before the Consults Package is turned on in VISTA will save countless hours of frustration and misunderstanding later.

Consults Install, Planning, and Implementation Checklist

This checklist can help you walk through the steps needed to implement the Consults package.

Œ

NOTE: Important changes since Consults/Request Tacking Version 2.5 are emphasized with a note.

INSTALL NOTES

The Consult/Request Tracking V. 3.0 package installs automatically when CPRS V. 1.0 installed.

PLANNING NOTES

NOTE: Effective with Consults/Request Tracking V. 3.0:

- 1. A service is only selectable for update/tracking if it is defined as part of the All Services hierarchy.
- 2. Disabled services can be left in the All Services hierarchy so their order results can be returned, but are not selectable in the ordering process.
- 3. Tracking services must be in the All Services hierarchy in order to receive forwarded consults. The tracking service can only be selectable in the order forwarding process if the user is an update user for the tracking service or its parent service.

Plan the Consult Service Hierarchy

Ц	1a. Identify services to receive consults.
	1b. Determine if the service should be selectable in the ordering process from CPRS.
	For some consults, the order may need to be sent to a Service control point for forwarding to a service that has been identified as a "Tracking Only" service. (Tracking Only services are not selectable during the initial CPRS order process.) If a service control point is desired, the tracking services should be subspecialties under the control point service within the All Services hierarchy.
	1c. Determine if there should be a service that will be used as a "Grouper Only" (e.g., Inpatient Services, Outpatient Services, and Outside Services might be good services to define as groupers).

Consults Install, Planning, and Implementation Checklist, cont'd

Plan Service Users and Notification Recipients

When a Grouper Only service is selected in the CPRS order process, the service hierarchy defined under the grouper service will be displayed for selection items. The Grouper Only cannot be selected to receive an order. The All Services service is a Grouper Only, provided to build the Consult Service hierarchy upon.

	2. Identify individuals at the receiving service who should be notified when a consult is being sent to the receiving service.
	3. Identify service teams of clinicians or service users who should receive notifications.
	Team definitions may be used in addition to (or in lieu of) naming individuals to receive notifications. The teams for each service may be broken down by hospital locations that the clinicians follow if desired.
	4. Identify individuals at the receiving service who will NOT receive notifications about new consults, but should be able to perform update capabilities for this service.
	5. Identify the service printers that will be used to automatically print Consult Form 513s when a consult order is received from CPRS.
TON	TE: Effective with Consult/Request Tracking V. 3.0, all Consult Form 513 prints are done from Consult routines. OE/RR print templates are no longer used for consult prints.
Specif	ic Procedures or Requests for Service(s)
	6a. <i>Optional</i> : Identify direct request or procedure orders that specific consult services may receive, which do not require a Consult. (e.g.,EKG: Portable)
	6b. Plan questions/templates for ordering clinicians to be asked when the order is placed. This would become the text for the Reason for Request.
	7. Identify the types of information the Receiving Services will need to see for their patients in a Health Summary report.
	D NOT

Consi	ults In	stall, Planning, and Implementation Checklist, cont'd
		8. Identify Ordering Providers who should receive a notification when the Receiving Service has reached a resolution of <i>completed</i> , <i>denied</i> , or <i>discontinued</i> for a consult ordered by the provider.
TIU	Setup	
		9. Plan your hospital's TIU hierarchy. See the <i>Text Integration Utility (TIU) Implementation Guide</i> for details on this step.
		10. If you have not already done so, install TIU*1*4.
		11. Run the TIU DEFINE CONSULTS option.
₽	NO	TE: If you do not run the TIU DEFINE CONSULTS option, no status update takes place when the TIU note is entered.
		12. Enter the rest of your planned TIU document hierarchy using the Manager Document Definition Menu.
		13. Define consult document parameters using the <i>Document Parameter Edit</i> option.
Œ	NO	FE: We strongly recommend entering Yes to ALLOW >1 RECORDS PER VISIT.
IMP	LEM	IENTATION AND MAINTENANCE (Abbreviated guidelines)
		1. Add the GMRC MGR option menu to the ORMGR option menu, with a mnemonic of CS.
		2. Add the ORLP TEAM MENU option to GMRC MGR option menu, with a mnemonic of TE.
		3. Add the ORB NOT MENU option to the GMRC MGR option menu, with a mnemonic of NO.
		4. Add the GMRC GENERAL SERVICE USER, GMRC MEDICINE USER, or the GMRC PHARMACY USER menu to the menus of Consults users who need more functionality than the CPRS consults tab provides.

5. (optional) Set up a team for each consult service. Use the *Team Mgmt Menu* option, ORLP TEAM MENU. 6. Turn on the NEW SERVICE CONSULT/REQUEST notification for each of the individuals who were identified to receive notifications. Use the Enable/Disable Notifications option of the NOTIFICATION MGMT MENU, ORB NOT MGR MENU. **F NOTE:** Unless Consult notifications are set to mandatory, individual users must use the Enable/Disable My Notifications option of the Notifications Management Menu to individually enable the notifications they want to receive. 7. Turn on the CONSULT/REQUEST RESOLUTION notification for all the ordering provider users identified to receive this notification, or train them to do it themselves. Use the Enable/Disable Notifications option of the NOTIFICATION MGMT MENU, ORB NOT MGR MENU. 8. Turn on the CONSULT/REQUEST CANCEL/HOLD notification for all the ordering providers identified to receive this notification, or train them to do it themselves. Use the Enable/Disable Notifications option of the NOTIFICATION MGMT MENU, ORB NOT MGR MENU. 9. Define the Service hierarchy in the Request Services File (#123.5) with the associated users and service printer. Use the Set up Consult Services option, GMRC SETUP REQUEST SERVICES. 10. Add the Set up Service Users [GMRC SETUP SERVICE USERS] option to the users who are allowed to manage service users. 11. Add the following two options to Service update users' primary or secondary menu option: Consult Tracking [GMRC SERVICE TRACKING] and Service Consults Pending Resolution [GMRC RPT PENDING CONSULTS]. 12a. (Optional. With V. 3.0, services do not need to be protocols to be included on the Add New Orders screen. Adding the service to the hierarchy makes it a valid orderable item.) Create Protocol entries in the PROTOCOL File for each Service that should appear on the Add New Orders Screens.

Consults Install, Planning, and Implementation Checklist, cont'd

Consults Install, Planning, and Implementation Checklist, cont'd		
	12b. Use the <i>Set up Consult Protocols</i> [GMRC SETUP PROTOCOLS] option to define these services as "Consult Types." These Protocol entries will be created with a name prefix of "GMRCT."	
	13a. (Optional) If direct request items were identified related to a RECEIVING SERVICE, create Protocol entries in the PROTOCOL File for each Direct Request Item which should appear on an Add New Orders Screen. Use the Set up Consult Protocols [GMRC SETUP PROTOCOLS] option to define these direct request items as "Procedure Requests." These Protocol entries will be created with a name prefix of "GMRCR."	
	13b. Add the "PROCEDURES," GMRCOR REQUEST protocol item to the OR GMENU OTHER ORDERS protocol menu. Use the <i>Protocol Menu Edit</i> [ORCL PROTOCOL MENU EDIT] option.	
	14. If using a site-defined Form 513: Transfer Consult Form print formats (defined in File 100.23) needing changes to a local print format and make the changes needed. Then alter the Order Parameters file (#100.99) Service Copy Header, Footer, or Body for the Consult Tracking Package.	
	15. Turn on the Package Site Parameter "ON:" field for the Consult Tracking Package in the ORDER PARAMETERS FILE (#100.99).	
	16a. Define Health Summary Types that the receiving services need.	
	16b. Provide Health Summary options to appropriate service users and inform them of the Health Summary Type defined for their use.	
Multi-Sit	e	
	Use the <i>Set up Consult Site Parameters</i> (PA) on the Consult Management menu to add multi-site or multi-division information to the Request Services list.	

D. Dietetics

Dietetics Patch 6 is installed with CPRS, but it doesn't require any set-up for CPRS.

E. Health Summary

New Health Summary parameter and option

GUI Health Summary Types [ORW HEALTH SUMMARY TYPES]

This option allows you to set up a list of health summary types to be displayed on the GUI Reports tab. Don't add health summaries that require additional prompting (e.g., for date ranges & occurrence limits) since the GUI cannot support this type of prompting.

Patch GMTS*2.7*12

This patch contains a new Health Summary component, *Selected Progress Notes*, which allows selection of specific Progress Notes Titles for display on Health Summaries. The Progress Notes, Discharge Summary, and CWAD components now extract data from TIU, rather than Progress Notes (GMRP) or Discharge Summary (GMRD). Care has been taken to assure that the formatting and content of the components have remained the same, except that the signature block information will now reflect the author's (and cosigner's) name and title at the time of signature, rather than displaying their current values at the time of output.

Patch GMTS*2.7*14

The purpose of Health Summary Patch 14 is to update the Radiology/Nuclear Medicine Health Summary to reflect Exam Sets on the Radiology Profile and Radiology Impression components. Diagnostic codes have been added to the profile, and the wording of labels, descriptions, and default header names has been changed from Radiology to Imaging to reflect the inclusion of Nuclear Medicine and other imaging types in the health summary data.

After the installation of this patch, Health Summary ADPACs should check the headers on Health Summary Types created prior to the installation of GMTS*2.7*14. Headers created prior to GMTS*2.7*14 can be edited through the *Create/Modify Health Summary Type* option. Health Summary ADPACs should review the components displayed when using the *Ad Hoc Health Summary* option. If header changes are needed, edit the header by using the *Edit Ad Hoc Health Summary Type* option.

GMTS*2.7*14 updates the default header names of the following entries in the Health Summary Component file #142.1: RADIOLOGY IMPRESSION, RADIOLOGY IMPRESSION SELECTED, RADIOLOGY PROFILE, and RADIOLOGY STATUS. (This will take effect in health summary types created after this patch is installed—new health summary types will contain the new default headers.)

Patch GMTS*2.7*15

This patch updates the Current Orders, IV Pharmacy, Outpatient Pharmacy, and Unit Dose Pharmacy components, to make them compatible with new the file design in CPRS.

F. Laboratory

Both the Lab package and the CPRS package contain site parameters for the CPRS-Lab interface. Previous options on the Lab Liaison Menu still operate to set parameters for CPRS. Lab patch LR*5.2*121 introduces new parameters options.

Lab Site parameters set within CPRS

Edit Site Local Terms

After CPRS installation, each site must run this option to link terms used in the expert system to local terms. Terms like Serum Creatinine must be mapped to the lab test file.

Edit Site Local Terms Example

```
Select OPTION NAME: OCX MAIN
                                   Order Check Expert System Main Menu
          Compile Rules
   2
          Expert System Rule Activate/Inactivate
          Edit Site Local Terms
   3
          Expert System Inquire
Select Order Check Expert System Main Menu Option: 3 Edit Site Local
Terms
   Order Check National Terms
     SERUM CREATININE
     SERUM UREA NITROGEN
    PROTHROMBIN TIME
     THROMBOPLASTIN TIME PARTIAL
     NPO
     SERUM SPECIMEN
     PARTIAL THROMBOPLASTIN TIME
     ANGIOGRAM (PERIPHERAL)
     WBC
      < Enter ?? to see the rest of the national terms on this list>
Select National Term: PROTHROMBIN TIME
National Term: PROTHROMBIN TIME
  Translated from file: 'LABORATORY TEST'
        PΤ
               (467)
Select LABORATORY TEST NAME: PT
        467. PT
Select LABORATORY TEST name: <Enter>
```

Inpt Lab Order/Result Search Range

This option on the GUI Cover Sheet Display Parameter menu on the CPRS Parameters menu sets the range of dates for lab orders and results to be displayed on the Cover Sheet. This option allows you to modify the *system's* default number of days to display on the cover sheet for Inpatient Lab Orders and Results, Outpatient Lab Orders and Results, Radiology Exams, Consult/Requests, Appt Start Dates, Appt Stop Dates, Visit Start Dates, Visit Stop Dates, and Clinical Reminders.

All of the options on this menu are very similar to this example.

```
Select CPRS Parameters Option: se GUI Cover Sheet Display Parameters
         GUI Cover Sheet System Display Parameters
         GUI Cover Sheet Division Display Parameters
  DT
         GUI Cover Sheet Service Display Parameters
  LO
         GUI Cover Sheet Location Display Parameters
         GUI Cover Sheet User Display Parameters
Select GUI Cover Sheet Display Parameters Option: SY GUI Cover Sheet System
Display Parameters
GUI Cover Sheet - System for System: OEX.ISC-SLC.VA.GOV
Lab Order/Result Inpatient Search Range
Lab Order/Result Outpatient Search Range
                                               60
Radiology Exam Search Range
Consult/Request Search Range
Appt Search Start Date
Appt Search Stop Date
Visit Search Start Date
Visit Search Stop Date
Clinical Reminders for Search
______
Inpatient Lab Number of Search Days: 60
Outpatient Lab Number of Search Days: 365
Radiology Exam Number of Search Days: 60// <Enter>
Consult/Request Number of Search Days: 120
For Appt Search Start Date -
Select Clinic: <Enter>
For Appt Search Stop Date -
Select Clinic: <Enter>
For Visit Search Start Date -
Select Hospital Location: <Enter>
For Visit Search Stop Date -
Select Hospital Location: <Enter>
For Clincal Reminders for Search -
Select Number: <Enter>
```

Lab Site parameters set within Lab

• Some lab tests are not meant to be resulted. This is indicated in the Lab test file (#60) and the Orderable Items file (#101.43). In both files there is a field called TYPE. The field in both files is a set of codes which indicates if the lab test is to be resulted or not. The codes consist of I:Input, O:Output, B:Both and N:Neither. If the TYPE for a lab test in the Lab file or Orderable Item file is set to "I" or "N," results will not be sent by lab. This may sometimes be set incorrectly and should be looked at when troubleshooting lab results-related notifications/alerts such as Lab Results, Abnormal Lab Results, Critical Lab Results, and STAT Results Available. If a lab results-related notification is not firing for a particular lab test, check the TYPE field for that test in the Lab Test and Orderable Items files. If it is "I" or "N" in either file, the results will not be posted via HL7 and the alert will not be sent.

• Edit Hospital Site parameters

This option (on the OE/RR Interface Parameters menu on the Lab Liaison menu) sets the parameters used in the Lab – CPRS interface, by location, to define the maximum number of days for continuous lab orders, whether or not to ask for an urgency, and the default type of collection.

Edit Hospital Site parameters example

```
Select OE/RR Interface parameters Option:
                                           EH Edit HOSPITAL SITE parameters
Select LABORATORY SITE SITE NAME: HOSPITAL
Select HOSPITAL SITE: ?
Enter hospital location you wish to establish parameters for.
MAX DAYS FOR CONTINUOUS ORDERS:// ??
This is the maximum number of days that multiple-continuous orders can be
placed for this location.
CANCEL ON WARD TRANSFER: ??
CANCEL ON SERVICE TRANSFER: ??
ASK URGENCY: // ??
Answer yes to this field to prompt for urgency for every test when ordering
through OE/RR. Tests with a forced urgency, as defined in the LABORATORY
TEST file, override this parameter.
DEFAULT TYPE OF COLLECTION: ??
Enter the default type of collection for blood draws that this location uses
the majority of the time. If one is not defined the default will be based
upon the following:
  Inpatient Locations: Lab Collect (LC)
  All other locations: Send Patient (SP)
```

• Edit Lab Administration Schedule

Use the *Inquire to lab administration schedule* option (on the OE/RR Interface Parameters menu on the Lab Liaison menu) to view schedules, and *Edit a lab administration schedule* option to make changes or to add new schedules.

```
Select OE/RR interface parameters Option: AS Edit a lab administration
schedule
Select ADMINISTRATION SCHEDULE: QAM
NAME: QAM// <Enter>
TYPE OF SCHEDULE: ??
The type of schedule determines how the schedule will be processed.
STANDARD ADMINISTRATION TIMES: ??
The times of the day for this schedule that the action should take place.
Use military time (24 hour clock) when entering the times.
FREOUENCY (IN MINUTES): // ??
The number of minutes between each time that the action should take place.
Select HOSPITAL LOCATION: ??
Enter a hospital location for which a specific set of times or shifts
Select ADMINISTRATION SCHEDULE: ??
This is a set of administration times for this schedule specific to this
hospital.
```

NOTE: Lab administration schedules are fully functional as exported. If sites choose to use the lab administration schedules as they are exported, all hospital location sites will have the same administration schedule. Many sites set CPRS up through a phased implementation, activating hospital locations as users become proficient with the software. Edit the administration schedules to create schedules for specific hospital locations.

Lab Patch LR*5.2*121

This patch helps prepare sites for the release of OE/RR 3.0. All of the changes in this patch are compatible with OE/RR 2.5. This patch includes new routines, Data Dictionary changes, and new Options and Protocols. The majority of the changes introduced with this patch will not take effect until CPRS/OE/RR 3.0 is installed.

Associated patches that must be installed BEFORE LR*5.2*121:

LR*5.2*100 LR*5.2*127 LR*5.2*171

This patch requires the installation of patch LR*5.2*127, which has some new utilities to facilitate the linking of Laboratory Tests to the National VA Lab Codes found in file 64. This linking process needs to be done before the installation of OE/RR version 3 and should be done by Laboratory personnel familiar with all Laboratory Procedures, perhaps the Laboratory Information Manager.

This patch also includes some programmer APIs for retrieving lab results, by patient, in structured arrays and also in formatted arrays. These APIs are currently being used by OE/RR 3.0, Imaging, TIU and some HOST initiatives. These APIs will be documented as Supported References on FORUM as Integration Agreements.

Implementation

Inform Lab users that canceled tests are no longer removed from the Lab files. The tests are marked as canceled and a record of the cancellation is maintained and displayed on the various lab status displays.

The Clinical Coordinator and the Lab Coordinator need to decide if/when to implement the automatic cancellation of lab orders when a patient movement occurs. To set up this functionality, the Laboratory Site file requires changes to three fields, and the Protocol file requires addition of a new item to the DGPM Movement Events protocol.

1. Go into VA Fileman and select *Enter or Edit File Entries*. Select the Laboratory Site file.

```
Select OPTION: ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: LABORATORY SITE
EDIT WHICH FIELD: ALL// 150.3 CANCEL ON ADMIT
THEN EDIT FIELD: 150.4 CANCEL ON DISCHARGE
THEN EDIT FIELD: 150.5 CANCEL ON SPECIALTY TRANSFER
THEN EDIT FIELD: <Enter>
Select LABORATORY SITE SITE NAME: HOSPITAL
CANCEL ON ADMIT: YES// ??
     This field allows the automatic cancellation of pending/uncollected
     lab orders when a patient is admitted. If this field is set to YES,
     the orders will be cancelled in the lab files and the OE/RR files.
     Choose from:
       0
      1
               YES
CANCEL ON ADMIT: YES// <Enter>
CANCEL ON DISCHARGE: YES// ??
  This field allows the automatic cancellation of pending/uncollected
   lab orders when a patient is discharged. If this field is set to YES,
   the orders will be cancelled in the lab files and the OE/RR files.
     Choose from:
       0
```

```
1 YES

CANCEL ON DISCHARGE: YES// <Enter>
CANCEL ON SPECIALTY TRANSFER: YES// ??

This field will enable cancellation of pending/uncollected lab orders when a patient's treating specialty changes.

Choose from:

0 NO
1 YES

CANCEL ON SPECIALTY TRANSFER: YES// <Enter>
Select LABORATORY SITE SITE NAME: <Enter>
```

2. Go into VA Fileman again and select *Enter or Edit File Entries*. This time select the Protocol file.

```
Select OPTION: ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: OPTION// 101 PROTOCOL
                                              (3374 entries)
EDIT WHICH FIELD: ALL// ITEM
         ITEM
      1
                   (multiple)
      2.
         ITEM TEXT
 CHOOSE 1-2: 1
    EDIT WHICH ITEM SUB-FIELD: ALL// <Enter>
 THEN EDIT FIELD: <Enter>
                                             MOVEMENT EVENTS v 5.0
 Select PROTOCOL NAME: DGPM MOVEMENT EVENTS
 Select ITEM: LR70 MOVEMENT EVENT// ?
 Answer with ITEM
 Do you want the entire 22-Entry ITEM List? Y (Yes)
 Choose from:
    ORU PATIENT MOVMT
    DGPM TREATING SPECIALTY EVENT
    SD APPT STATUS
    FHWMAS
    PSJ OR PAT ADT
   DGJ INCOMPLETE EVENT
    DGOERR NOTE
    GMRADGPM MARK CHART
    ORU AUTOLIST
    DG MEANS TEST DOM
    IB CATEGORY C BILLING
    VAFED EDR INPATIENT CAPTURE
    YS PATIENT MOVEMENT
    SC PCMM INPATIENT ACTIVITY
    SC ASSIGN PC TEAM ON DISCHARGE
    OCX ORDER CHECK PATIENT MOVE.
    OR GUA EVENT PROCESSOR NOTASK
    VSIT PATIENT STATUS
   LR70 MOVEMENT EVENT
    You may enter a new ITEM, if you wish
      Enter a protocol. A protocol that is an ancestor may not also be a
      sub-item.
 Answer with PROTOCOL NAME, or ITEM TEXT, or SYNONYM, or ACCESS, or
      SET MEMBERSHIP
 Do you want the entire 3374-Entry PROTOCOL List?
 Select ITEM: LR70 MOVEMENT EVENT// LR70 MOVEMENT EVENT <==Add this as a new
   ITEM: LR70 MOVEMENT EVENT// <Enter>
   MNEMONIC: <Enter>
  SEQUENCE: 69//
                  [This # should be less than all OR* item sequences]
  MODIFYING ACTION: ^
Select ITEM: <Enter>
Select PROTOCOL NAME: <Enter>
```

Blood Bank Evaluations

Since this patch contains a Blood Bank namespaced routine, the following evaluations are necessary to be in compliance with FDA requirements.

THE CHANGE IN THE LRBLPE ROUTINE WAS CLEARED FOR INSTALLATION IN PRODUCTION ENVIRONMENT BY FDA OFFICE OF COMPLIANCE, CENTER FOR BIOLOGICS EVALUATION AND RESEARCH, ON 5-30-97.

PROBLEM: It is necessary to modify the Blood Bank software to create an HL7 message to update CPRS when a Blood Bank order is processed. This is so that no functionality is lost when CPRS 1.0 is installed at the sites, which will be dependent upon HL7 messages rather than direct global reads to display information to the user.

RISK ANALYSIS: Changes made are totally transparent to the user and have no effect on blood bank software functionality, therefore the risk is NONE.

EFFECT ON BLOOD BANK FUNCTIONAL REQUIREMENTS: Problems do not involve any software design safeguards for safety critical elements.

POTENTIAL IMPACT ON SITES: Changes in this patch specific to the blood bank routine modified should have no impact on sites installing this patch.

VALIDATION REQUIREMENTS BY OPTION: Because of the nature of the changes made, no specific validation requirements exist as a result of installation of this patch.

New Lab Options

LR70 PAR DOMAIN	Domain Level Parameter Edit
LR70 PAR LOC	Location Level Parameter Edit
LR70 PAR PKG	Package Level Parameter Edit
LR70 PARAM MENU	Update CPRS Parameters
LR70 ORDER PARAMETERS	Update CPRS with Lab order parameters
LR70 SINGLE LAB TEST	Update CPRS with Single Lab test
LR70 ALL LAB TESTS	Update CPRS with all Lab test parameters
LRACC MERG	Merge Accessions

With the exception of LRACC MERG, these options are not used until OE/RR 3.0 is installed.

LRACC MERG is installed on the Lab Accessioning menu (LR IN). It is used to merge 2 accessions in one step. Before this option was created, it was necessary to delete tests from an accession and then add them back onto the appropriate accession. This had the effect of DCing an order and Adding an order in OE/RR. The Merge option now maintains all the links to the original Doctor's order without DCing and adding new entries. See the option description for more information.

New Protocols

LR70 AP EVSEND OR	ANATOMIC PATH => OE/RR ORDER MESSAGE
LR70 BB EVSEND OR	BLOOD BANK => OE/RR ORDER MESSAGE
LR70 CH EVSEND OR	LAB => OE/RR ORDER MESSAGE EVENT
LR70 ALL EVSEND RESULTS	LAB RESULTS => EXTERNAL PACKAGE

These new Protocols create HL7 messages to be used by applications that want to receive orders, status updates, and completed lab results from the Lab package. When OE/RR 3.0 is released, it will connect to the EVSEND protocols to pick up the HL7 messages and create new orders.

If a package is only interested in messages that contain verified lab results, then the protocol LR7O ALL EVSEND RESULTS should be used to eliminate the need to look for result-only type messages (Control code=RE).

Tricks & Tips

1. Code to screen out the printing of LC Lab collect type orders on the service device:

File: OE/RR Print FORMAT Name: LAB REQUISITION

Screen: I \$G(ORIFN),\$\$VALUE^ORCSAVE2(ORIFN,"COLLECT")'="lc"

2. Setting Up ASK URGENCY

ASK URGENCY: There are three different ways that this parameter will manifest itself. Other parameters that play a part in the decision tree are the DEFAULT URGENCY field in 69.9, which is a hospital-wide parameter and the FORCED URGENCY and HIGHEST URGENCY ALLOWED fields in File 60 (LABORATORY TEST File).

This is how it works

- If ASK URGENCY = YES, DEFAULT URGENCY = ROUTINE and FORCED URGENCY = NULL, the user will he prompted for an urgency with a default of ROUTINE,
- If ASK URGENCY = NO, DEFAULT URGENCY = ROU'I'INE and FORCED URGENCY = NULL, the user will not be prompted for an urgency and the default will he ROUTINE.
- If ASK URGENCY = YES, DEFAULT URGENCY ROUTINE and FORCED URGENCY = STAT, the user will not he prompted for an urgency and the default will he STAT,

The HIGHEST URGENCY field in File 60 is overridden by FORCED URGENCY and if ASK URGENCY is set to NO, then the test will he given the DEFAULT URGENCY even if it is higher than the HIGHEST URGENCY ALLOWED.

IMPORTANT POINT: The DEFAULT URGENCY field in File 6.9S is a required field and will normally he set to ROUTINE. Remember that the ASK URGENCY prompt is defined by location, If you are ordering for a location that has not been entered into the HOSPITAL SITE multiple in File 69.9, the urgency will not he asked and the DEFAULT URGENCY will be used unless a FORCED URGENCY is defined.

G. Pharmacy Packages

The Pharmacy packages relevant to CPRS are:

- Pharmacy Data Management (PDM) V. 1.0 (released prior to CPRS)
- Outpatient Pharmacy V. 7.0
- Inpatient Medications V. 5.0

IV

Unit Dose

Summaries of the set-up procedures for these packages are included on the following pages.

See the Pharmacy Technical Manuals for COMPLETE details on implementing and maintaining these packages.

G-1. Pharmacy Data Management (PDM)

PHARMACY ORDERABLE ITEM file

When medication orders are entered through CPRS, the name and dose form of the medication to be administered will be selected from the PHARMACY ORDERABLE ITEM file (#50.7). After the drug and dose form have been identified, the user will have the option of selecting from the list of the dispense drug(s). To provide this functionality, a new file was created by pharmacy to create the list of Orderable items available through CPRS. This new PHARMACY ORDERABLE ITEM file (#50.7) is similar to the current PRIMARY DRUG file (#50.3), but also includes a dose form field that will always be displayed along with the drug name.

The Pharmacy Orderable Item name can be printed on Inpatient reports, profiles, MAR labels etc., in place of the Primary Drug Name. The Pharmacy Orderable Item name will also print on Outpatient reports and profiles, along with the Dispense drug name. The only time this is not the case is when finishing an order entered through CPRS in which a Dispense drug was not chosen. A more detailed explanation is included in the Inpatient Medications V. 5.0 and Outpatient Pharmacy V. 7.0 documentation. PDM contains the options necessary to create and populate the new PHARMACY ORDERABLE ITEM file (#50.7).

The following page contains the options exported with this package used to complete all of the Pharmacy tasks required for the installation of Outpatient Pharmacy V. 7.0 and Inpatient Medications V. 5.0.

Pharmacy Data Management Menu

Primary/VA Generic Orderable Item Report VA Generic Orderable Item Report Create Pharmacy Orderable Items * Manually Match Dispense Drugs * Orderable Item Matching Status Edit Orderable Items Dispense Drug/Orderable Item Maintenance Additive/Solutions, Orderable Items Orderable Item Report Drug Enter/Edit Lookup into Dispense Drug File Med. Route/Instructions Table Maintenance Medication Instruction File Add/Edit Standard Schedule Edit ELectrolyte File (IV) Enter/Edit Local Drug Interaction Edit Drug Interaction Severity Primary Drug Edit Edit IV Identifier CMOP Mark/Unmark (Single drug) Locked with PSXCMOPMGR Information Creating A Sig Using Information From CPRS Order Entry

G-2. Outpatient Pharmacy Setup

See the Outpatient Pharmacy V. 7.0 Technical Manual for complete details on implementing and maintaining the package and the User Manual for an explanation of these options.

Maintenance (Outpatient Pharmacy) [PSO MAINTENANCE]

```
Site Parameter Enter/Edit
Edit Provider
Add New Providers
Queue Background Jobs
Autocancel Rx's on Admission
Bingo Board Manager ...
Edit Data for a Patient in the Clozapine Program
Enter/Edit Clinic Sort Groups
Initialize Rx Cost Statistics
Edit Pharmacy Intervention
Delete Intervention
Auto-delete from Suspense
Delete a Prescription
Expire Prescriptions
Purge Drug Cost Data
Purge External Batches
Recompile AMIS Data
```

^{*} These items are for pre-release only and will be deleted with the installation of Outpatient Version 7.0.

Outpatient Pharmacy Keys

Key	Assignment
PSORPH	All pharmacists, the package coordinator, and all appropriate members of the ADP/IRM staff.
PSOA PURGE	The package coordinator and/or any person who will be responsible for archiving prescriptions.
PSOLOCKCLOZ	This key is used to override the lockouts in the Clozapine option. All members of the Clozapine treatment team must be entered as users on your system and must be given this key. All pharmacists who have the ability to override the lockouts in this option must also hold this key. These pharmacists should be identified by the Pharmacy Service representative of the Clozapine treatment team.
PSOINTERFACE	Users of the External Interface Menu.

Archiving Device Setup

The following are examples for the archive device setup for file and tape. These examples may differ from site to site. If your device differs, check with your IRM service for information on setting up your device.

```
HOST FILE SERVER (HFS) DEVICE SETUP:
NAME: HFS
                                           $I: ARC0797.TMP
ASK DEVICE: YES
                     ASK PARAMETERS: NO
VOLUME SET(CPU): VAA
                                          QUEUING: ALLOWED
LOCATION OF TERMINAL: COMPUTER AREA
                                          ASK HOST FILE: YES
ASK HFS I/O OPERATION: YES
                                          *MARGIN WIDTH: 132
*FORM FEED: #
                                          *PAGE LENGTH: 64
*BACK SPACE: $C(8)
                                           SUBTYPE: P-OTHER
TYPE: HOST FILE SERVER
BAUD RATE (c): UNKNOWN
```

```
MAGNETIC TAPE DEVICE SETUP:
NAME: TAPE (T7867)
                                         $I: $3$MKA600:
ASK DEVICE: YES
                                         ASK PARAMETERS: YES
SIGN-ON/SYSTEM DEVICE: NO
LOCATION OF TERMINAL: COMPUTER ROOM
*MARGIN WIDTH: 255
                                         *FORM FEED: #
*PAGE LENGTH: 256
                                         *BACK SPACE: $C(8)
OPEN PARAMETERS: (FORMAT="VAL4":BLOCKSIZE=2048)
SUBTYPE: MAGTAPE
                                         TYPE: MAGTAPE
PERFORM DEVICE CHECKING: NO
BAUD RATE (c): UNKNOWN
```

08/21/00

Outpatient Pharmacy, cont'd

Bingo Board Device Setup

You must set up a dedicated device to be used for the bingo board. See the VAX DSM Systems Guide V. 2.0 for information on setting up the bingo board device. Only devices with the sub-type C-VT will be allowed to be entered at the DISPLAY DEVICE prompt in the *Enter/Edit Display* option found on the *Bingo Board Manager* menu. Once a dedicated device is setup, the bingo board can be scheduled to automatically start and/or stop at user-defined times.

MUMPS Audiofax (Telephone Refill Requests)

If you are using MUMPS Audiofax to process telephone refill requests, a new VEXRX routine must be installed to interface with Outpatient Pharmacy V. 7.0. To install this routine, go to SHOP ALL on FORUM and in the TELEPHONE REFILL REQUESTS Basket, retrieve the message "VEXRX for Outpatient V. 7." This message will contain the new VEXRX routine. This routine must be forwarded and installed on your production account.



Important : You cannot process telephone refill requests (MUMPS Audiofax) without the new VEXRX routine.

G-3. Inpatient Medications

See the Inpatient Medications V. 5.0 Technical Manual for complete details on implementing and maintaining the package.

Inpatient Medications Conversion

Order Conversion

For version 5.0, the PRIMARY DRUG is replaced by ORDERABLE ITEM. Conversions are included with this version that copy data in the old DOSAGE ORDERED field (#102) to the new DOSAGE ORDERED field (#109), and determines and adds an ORDERABLE ITEM (#108) to each order. Only orders that have a stop date less than 365 days prior to the 5.0 installation date will be converted. The installation date used by both methods described below is determined by the DATE KIDS BUILD LAST RUN field (#20.2) in the PHARMACY SYSTEM file (#59.7).

Inpatient Medications, cont'd

Order Location Codes will be standardized to **V** for the IV subfile of PHARMACY PATIENT file (#55), **U** for the Unit Dose subfile of PHARMACY PATIENT file (#55), and **P** for Orders in NON-VERFIED ORDERS file (#53.1). On orders in the IV subfile of 55, a new field was added to the ACTIVITY LOG multiple which is a pointer to NEW PERSON file (#200). This field ENTRY BY (#6) is populated by taking the free text data from the ENTRY CODE field (#.23) and determining the corresponding INTERNAL ENTRY NUMBER (IEN) in File 200. If the determination can not be made a mail message is sent to holders of the PSJI MGR key with these identified.

Two methods are used to perform this conversion:

Background

When version 5.0 is installed, a process is queued to run in the background and convert existing Inpatient Medications orders. After a patient's orders have been processed, that patient's IEN will be stored in the LAST PATIENT CONVERTED TO 5.0 field (#25.1) of the PHARMACY SYSTEM file (#59.7). This will be used to determine where the process should begin if it must be restarted. When all of the orders for a patient have been processed, the CONVERTED FOR VERSION 5.0? field (#104) of the PHARMACY PATIENT file (#55) is set, showing the conversion has been accomplished for that patient. When all Inpatient Medications orders within the specified time frame on the system have been converted, the date/time the process completed will be stored in the DATE 5.0 CONVERSION COMPLETED field (#25.2) of the PHARMACY SYSTEM file (#59.7).

Patient Selection

Hooks have been added to convert the data "on the fly", if an order is accessed before the background conversion completes and before the selected patient's data has been converted by the background process. After converting the orders for the selected patient, the CONVERTED FOR VERSION 5.0? field (#104) of the PHARMACY PATIENT file (#55) is set, showing the conversion has been accomplished for that patient.

Pick List Conversion

A new field, ORDERABLE ITEM, is added to the Pick List file (#53.5). This field (#.06) of the ORDER multiple is populated as part of this conversion and the cross-references are recompiled so that the pick lists are ready for use with Version 5.0

Inpatient Medications, cont'd

Order Set Conversion

The dispense drug is used to determine Orderable Item which replaces Primary Drug. Once this conversion occurs the Order Sets are ready for use with Version 5.0. If any order within an order set is found that has multiple dispense drugs matched to different Orderable Items, the Order Set is not converted. A mail message is sent to all holders of the RPHARM key with these Order Sets identified.

Verification Data Conversion

Additional cross references have been added to identify orders which have not been verified by nursing or pharmacy.

Inpatient Medications protocols will be installed into the PROTOCOL file (#101). These protocols will be used for Inpatient Medication's interactions with CPRS, and to trigger the appropriate order action when a patient movement is entered by MAS.

The data in the ACTIVITY LOG REASON file (#53.3) will be deleted and rebuilt. This will be done to allow new entries to be added, and to update several existing entries.

Inpatient Medications List Templates will be installed into the LIST TEMPLATE file (#409.61). These will be used for Inpatient Medication's ListMan order processing functions.

These options are no longer used in Version 5.0 and will be deleted as part of the installation process.

```
PSJ QUICK ORDER REPORT
PSJ QUICK ORDERS
PSJ QUICK ORDERS MENU
PSJI NON-VERIFIED ORDERS
```

Input Templates

The functionality provided by the following input templates is now available through the Pharmacy Data Management (PDM) package and will be deleted as a part of the Version 5.0 installation.

```
PSJ EXT SCHEDULE EDIT
PSJ PD EDIT
PSJ SCHEDULE EDIT
PSJFILED
PSJI ADD
PSJI SOL
PSJQ FLUID
PSJQ MED
PSJUPDE
```

Inpatient Medications Options

There is no top-level Inpatient Medications menu. The Inpatient Medications options are contained within the IV and Unit Dose top-level menus (PSJI MGR and PSJU MGR respectively).

Inpatient Medications Security Keys

Key	Assignment
PSJ RPHARM	All pharmacists; designates the user as a PHARMACIST
PSJ RNURSE	Nurses
PSJ PHARM TECH	Pharmacy Technician
PSJI MGR	Inpatient coordinator, for access to the PSJI MGR option.
PSJI PURGE	Inpatient coordinator, for purging of expired orders.
PSJU MGR	Unit Dose package coordinator and/or Inpatient supervisor, for editing
	of basic background files and various management reports.

The PSJ RPHARM supersedes the other two keys - if a user is assigned the PSJ RPHARM key and either of the other two keys, the user will be seen by the package as a Pharmacist. In the same manner, the PSJ RNURSE key supersedes the PSJ PHARM TECH key.

Auto-Discontinue Setup

The following parameters deal with auto-discontinuing patients' orders whenever patients are transferred between wards, services, or to Authorized or Unauthorized Absence.

To edit the AUTO-DISCONTINUE SET-UP from within the IV Medications module, choose the following sequence of options:

```
IV Menu Option
Supervisor's Menu (IV)
Auto-Discontinue Set-Up
```

To edit the AUTO-DISCONTINUE SET-UP from within the Unit Dose Medications module, choose the following sequence of options:

```
Unit Dose Medications Option
Supervisor's Menu
Parameters Edit Menu
AUto-Discontinue Set-Up
```

Refer also to the *Unit Dose User Manual* or the *IV User Manual*.

Inpatient Medications, cont'd

Medication Administration Setup

To edit the MAR parameters choose the following sequence of options:

Unit Dose Medications Option
Supervisor's Menu
Parameters Edit Menu
Inpatient Ward Parameters Edit

Inpatient Meds and CPRS

The Inpatient Medications' protocols for use with CPRS are automatically installed as part of the KIDS build process.

G-3.a IV Setup

If your site is currently running Inpatient Medications Version 4.5, no additional set-up is required. Otherwise, do the following:

1. Enter package users into the system, assigning the following option as the primary menu option:

User	Primary Menu Option:
Nurses	PSJI USR1
Technicians	PSJI USR2
Pharmacists, Supervisors,	
and Pharmacy Package Coordinator	PSJI MGR

- 2. Key allocation: In order for the package coordinator to have access to the *Supervisor's Menu*, he or she must hold the PSJI MGR key. Certain users allowed to purge orders (usually the package coordinator) must hold the PSJI PURGE key.
- 3. The background option *PSJI BACKGROUND JOB* should be scheduled to run nightly by someone in your IRM Service or ADP Department. This option compiles the IV statistical data for each day.

Inpatient Medications, cont'd

4. The functionality accomplished by the following options has been moved to PDM:

```
PRimary Drug Edit [PSJ PRIMARY DRUG EDIT]
ADditives File [PSJI DRUG]
STandard Schedule Edit (IV) [PSJI SCHEDULE EDIT]
PRimary Solution File (IV) [PSJI SOLN]
Dispense Drug Fields [PSJU DRG]
MARk/Unmark Dispense Drugs For Unit Dose [PSJU MARK UD ITEMS]
Instructions (Medications) [PSJU MI]
MEdication Routes [PSJU MR]
Standard Schedule Edit [PSJU SCHEDULE EDIT]
```

Site Parameters (IV) [PSJI SITE PARAMETERS]

This option allows the package coordinator to define the characteristics of the IV room and/or satellites to the package. Such things as manufacturing and delivery times, label size, use of suspense, and same day IV order expiration are identified. This information is stored in the IV ROOM file (#59.5). You must define at least one IV room in order for the IV module to function correctly. You can, at any time, alter the definition of the IV room, and you do not have to exit the module and re-enter for the change to be in effect.

To enter or edit the IV ROOM file, choose the following sequence of options:

```
IV Menu
    SUPervisor's Menu (IV)
    SIte Parameters (IV)
```

Refer also to the IV User Manual.

G-3.b Unit Dose Setup

Menus and Security Keys

PSJU MGR is the only menu to be assigned to the users of this package.

Key	Assignment
PSJU PL	This key locks the <i>Pick List Menu</i> [PSJU PLMGR]. Assign this key
	to the Pharmacists and/or Pharmacy technicians who will be using
	the <i>Pick List</i> options.
PSJU MGR	This key locks the Supervisor's menu [PSJU FILE]. Assign this key
	to the Pharmacy package coordinators and/or Supervisors.

NOTE: The PSJU RPH security key is no longer exported. You may wish to review and remove the key from options, if appropriate.

(B)

Files Needed to Run Unit Dose

The following files must have data before the module can effectively run. See the Unit Dose Technical Manual for more information on each of the files:

DRUG file.

ORDERABLE ITEM.

WARD GROUP file.

MEDICATION ROUTES file.

INPATIENT WARD PARAMETERS file.

INPATIENT USER PARAMETERS file.



NOTE: The background option *PSJU BRJ* should be scheduled by someone in your IRM Service or ADP Department to run nightly. This option compiles the Unit Dose statistical data and purges information that has become out of date.

H. Problem List

Problem List doesn't require any set-up for CPRS.

Patch GMPL*2*10 contains changes needed to support CPRS:

New APIs were created to provide data to CPRS.

I. Radiology/Nuclear Medicine

Radiology Patch RA*4.5*11

This purpose of this patch is to:

- support OE/RR v.3 (CPRS) nature of order activity functionality,
- support CPRS quick order conversion prior to installation of CPRS,
- provide a CPRS HL7 interface to purge orders,
- correct various bugs in the Rad/OE3 interface, and
- provide a few other miscellaneous interface fixes and enhancements.

All CPRS-related functionality will be "invisible" to ADPACs and end users until CPRS is installed.

- In the Rad/Nuc Med Reason file #75.2, field NATURE OF ORDER ACTIVITY (#4) has been added. After CPRS is installed, Rad/Nuc Med ADPACs will need to assign each reason in this file to a CPRS code. This code will determine (for order hold and cancel reasons) whether or not a chart copy will be printed, whether an electronic signature is needed, and whether this action should be printed on the CPRS summary. The *Reason Edit* [RA REASON EDIT] option has been modified to allow editing this new field if CPRS is installed. Prior to installing CPRS this field will also be "invisible."
- The RACOMDEL routine included with this patch will be executed upon the installation of CPRS (OE/RR v3). If there are multiple entries in the Rad/Nuc Med Common Procedure file 71.3 pointing to the same procedure in the Rad/Nuc Med Procedure file #71, this routine will remove the duplicates, leaving the entry that is active on the common procedure list. It may also resequence the common procedure list causing the identifying numbers to change on user displays. This is necessary to insure that the orderable item updates sent from Rad/Nuc Med to CPRS work properly. This will have no effect on sites until CPRS is installed.
- The [RA COMMON PROCEDURE EDIT] template for the Rad/Nuc Med Common Procedure file #71.3 and routines RAORDU, RAORDU1 and RAMAIN2 have been modified to support a future OE/RR 2.5 patch which will convert quick orders prior to installation of CPRS (OE/RR 3.0). Changes in Rad/Nuc Med will use the existence or absence of file 101.41 to detect whether the OE/RR patch is installed. If the OE/RR patch is installed, the orderable item update HL7 messaging will be turned on to continuously update the new CPRS file whenever Rad/Nuc Med ADPACs add/edit a procedure or change its status on the common procedure lists.

J. Text Integration Utilities (TIU)

The Text Integration Utilities (TIU) package consists of Progress Notes, Discharge Summary, and a set of utilities for managing clinical documents. Progress Notes and Discharge Summary can be accessed directly through TIU for one or more patients, or through CPRS for individual patients. TIU is closely tied to Authorization/Subscription Utility (ASU), which helps to define roles and business rules (who can do what to TIU documents). Other clinical document applications, such as Consult/Request can use its utilities for uploading documents into **V***ISTA*, or to take advantage of the document definition hierarchy benefits, boilerplating, and other features of TIU.

Setting up Consult/Request Tracking in TIU

You can set Consults up as a separate Class (comparable to Discharge Summary or Progress Notes) or you can define Consults as a Document Class under Progress Notes. There are pros and cons to either strategy.

A: Create Consults as an independent CLASS, under Clinical Documents

- **Pro:** 1. Provides a *clear* separation of Consults from Progress Notes, and minimizes the number of choices for the end-user.
 - 2. Simple, with few concerns for maintainability (e.g., no question as to whether heritable methods and properties of Progress Notes were appropriately overridden, etc.).
- **Con**: 1. Not necessarily consistent with the way providers have been documenting their Consult Results in the past. (i.e., if they've been using PN titles to "result" consults, and referring to the notes on the 513's in the past, this will be a departure from that practice).
 - 2. Limits flexibility of access to the information. (i.e., if set up this way, they may only access the data through Integrated Document Management options on the TIU side, and through the Consults tab of the CPRS chart).
- **B:** Create Consults as a Document Class under Progress Notes.
- **Pro**: 1. Consistent with the way many providers have been documenting their Consult Results in the past.
 - 2. Enhances flexibility of access to the information. (allows access to data through any option in TIU, as well as through *either* the Consults or Progress Notes tabs of the CPRS chart).
- **Con**: 1. Does not provide a clear separation of Consults from Progress Notes, and may offer too many choices for the end-user.
 - 2. Complex, with some concerns for maintainability (e.g., if printing or filing appear incorrect, may result from heritable methods and properties of Progress Notes not being appropriately overridden, etc.).

Define CONSULTS for TIU/CT Interface

Patch TIU*1.0*4 contains an option that allows you to set Consults up as part of the Document Definition hierarchy. The following is a description of the option and the other steps necessary for allowing Consults to be accessed through TIU and CPRS.

1. Select the option *Define Consults for TIU/CT Interface* and enter the relevant information.

```
Select OPTION NAME: TIU DEFINE CONSULTS
                                            Define CONSULTS for
TIU/CT Interface
Define CONSULTS for TIU/CT Interface
I'm going to create a new Document Definition for CONSULTS now.
GREAT! A new Document Definition has been created for CONSULTS.
Next, you need to decide whether you want CONSULTS to be set up
as a separate CLASS (comparable to DISCHARGE SUMMARY or PROGRESS
NOTES), or whether you want CONSULTS defined as a DOCUMENT CLASS
under PROGRESS NOTES. The benefits of each strategy are outlined
in the POST-INSTALLATION instructions for this patch.
NOTE: If you're not yet CERTAIN which strategy you want your site
to adopt, then quit here, and get consensus first (it's easier to
get permission than forgiveness, in this case)!
    Select one of the following:
         CL
                   Class
         DC
                   Document Class
Define CONSULTS as a CLASS or DOCUMENT CLASS: DC Document Class
Okay, you've indicated that you want to make CONSULTS a Document Class.
Okay to continue? NO// YES
FANTASTIC! Your NEW DOCUMENT CLASS CONSULTS will now be added under
the PROGRESS NOTES Class...
Okay, I'm done...Please finish your implementation of CONSULTS by adding
any Titles as appropriate using the Create Document Definitions Option
under the TIUF DOCUMENT DEFINITION MGR Menu, as described in Step #3 of
the Post-Installation Instructions.
Press RETURN to continue...
```

2. You can verify that the upload header is appropriately defined for Consults using the option [TIU UPLOAD HELP]. The output will look something like this:

```
CONSULTS
<Message Header Signal>:
TITLE:
                                         CARDIOLOGY CONSULT
SSN:
                                         555-12-1234
VISIT/EVENT DATE:
                                          5/13/97@08:00
AUTHOR:
                                         HOWSER, DOOGEY
TRANSCRIBER:
                                         K5420
DATE/TIME OF DICTATION:
                                         5/13/97@11:00
LOCATION:
                                         MEDICAL-CONSULT 6200
EXPECTED COSIGNER:
                                         WELBY, MARCUS
CONSULT REQUEST NUMBER:
                                         1455
<Begin Text Signal>
CONSULTS Text
```

- File should be ASCII with width no greater than 80 columns.
- Use "@@@" for "BLANKS" (word or phrase in dictation that isn't understood), where <Message Header Signal> and <Begin Text Signal> will appear as you've defined them in your Upload Parameters for your site (e.g., \$HDR and \$TXT, etc.).
- 3. Use the *Create Document Definitions* option [TIUFC CREATE DDEFS MGR], under the IRM Maintenance Menu option [TIU IRM MAINTENANCE MENU], to construct a new document definition sub-tree for Consults that looks something like this:

Edit	Document Definition	s Sep	03,	1997	11:59	:04	Page:	1 of	1
BASI	CS								
	Name								Type
1	CLINICAL DOCUMEN	TS							CL
2	+DISCHARGE SUMN	IARY							\mathtt{CL}
3	+PROGRESS NOTES	1							CL
4	CONSULTS								DC
5									DC
6	MEDICINE	CONSULT							${ t TL}$
7	7 ENDOSCOPY								${ t TL}$
8									DC
9									${ t TL}$
10									${ t TL}$
11									${ m TL}$
12	+ADDENDUM								DC
?H	elp >ScrollRight	PS/PL 1	rint	Scrn	/List	+/-		>>:	>
Expand/Collapse Jump to Document Def				-		Delete		em Men	uTxt
1	Boilerplate Text Name/Owner/PrintName Copy/Move Select Action: Quit//								

The example above suggests a Service-oriented set of Document Classes with one or more titles under each. Of course, just like Progress Notes, these can include boilerplate text with embedded objects. It will probably take some time, with substantial cooperation between your Clinical Coordinator, IRMS, and the Consulting Services, to develop a complete set of Document Definitions for Consults at your site.

4. Next, define a set of Document Parameters for the new Consults class, using the Document Parameter Edit [TIU DOCUMENT PARAMETER EDIT] option under the TIU IRM MAINTENANCE MENU option, as follows:

```
TIU Parameters Menu ...
         Document Definitions (Manager) ...
         User Class Management ...
Select TIU Maintenance Menu Option: 1 TIU Parameters Menu
         Basic TIU Parameters
        Modify Upload Parameters
 3
        Document Parameter Edit
  4
        Progress Notes Batch Print Locations
        Division - Progress Notes Print Params
Select TIU Parameters Menu Option: DOCument Parameter Edit
First edit Institution-wide parameters:
Select DOCUMENT DEFINITION: CONSULTS
                                              DOCUMENT CLASS
        ...OK? Yes// <Enter> (Yes)
DOCUMENT DEFINITION: CONSULTS// <Enter>
REQUIRE RELEASE: n
                     NO
REQUIRE MAS VERIFICATION: u
                              UPLOAD ONLY
REQUIRE AUTHOR TO SIGN: y
                            YES
ROUTINE PRINT EVENT(S): <Enter>
STAT PRINT EVENT(S): <Enter>
MANUAL PRINT AFTER ENTRY: y
ALLOW CHART PRINT OUTSIDE MAS: y
                                     YES
ALLOW >1 RECORDS PER VISIT: n
                                 NO
ENABLE IRT INTERFACE: <Enter>
SUPPRESS DX/CPT ON NEW VISIT: <Enter>
EDITOR SET-UP CODE: <Enter>
                                                                          Identify local
If document is to be uploaded, specify Filing Alert Recipients:
                                                                          recipients as
                                                                          appropriate
Select FILING ERROR ALERT RECIPIENTS: -
                                                                          Identify per
Now enter the USER CLASSES for which cosignature will be required:
                                                                          local
                                                                          requirements
Select USERS REQUIRING COSIGNATURE: STUDENT//
Now enter the DIVISIONAL parameters:
Select DIVISION: [optional...you probably won't need to set up
auto-printing devices]
Press RETURN to continue...
```

- 5. Finally, use the option to Manage Business Rules, under the User Class Management Menu to specify the following rules, allowing Linking (or re-linking) of TIU documents with "requests" in a client application:
- 1 An UNSIGNED (CLASS) CLINICAL DOCUMENT may be LINKED by An AUTHOR/DICTATOR
- 2 An UNCOSIGNED (CLASS) CLINICAL DOCUMENT may be LINKED by An EXPECTED COSIGNER
- 3 A COMPLETED (CLASS) CLINICAL DOCUMENT may be LINKED by A CHIEF, MIS
- 4 An UNSIGNED (CLASS) CLINICAL DOCUMENT may be LINKED by A MEDICAL RECORDS TECHNICIAN

V. Troubleshooting

- **▼NOTE:** See the CPRS Troubleshooting page on the CPRS home page: <u>vista.med.va.gov/cprs/</u>
 - **Q.** How do sites handle document verification (nurse and clerk)? Do they still print 24-hour summaries, chart copies, etc. for nurses and clerks to initial? How would they know, otherwise, what's been done?
 - **A.** West Palm Beach requires online verification. Nurses do the majority of the verification, and they do this online, periodically throughout the day, at designated workstations on the wards or clinics. Some copies are printed and put in the chart for contingencies and backup, but basically, it's a paperless system.
 - **Q:** Where do you enter comments on an order?
 - **A:** You can add them under Ward Comments, under the Flag action, or in a Notification.
 - **Q.** What are the benefits of a GUI over the traditional **V***ISTA* programs or the List Manager version of CPRS?
 - **A.** A Windows-type environment (GUI) allows you to do many things easier and more efficiently. The visibility and accessibility of many components of a patient record allow you to move among them more freely to review and link data. You can choose your own workflow rather than having it dictated by the computer in a sequential way. Sometimes, the traditional roll 'n' scroll and List Manager have advantages. For straightforward data entry, these methods can be faster and less complex.
 - **Q:** My List Manager Screens aren't displaying or scrolling right; are there any reasons for this, or settings I can change?
 - **A:** You may have to update the Terminal Type file for the VT100. If the "Insert Line" field is empty, which for some reason is not uncommon, this will cause List Manager to revert back to scroll mode which may also be contributing to the weirdness you've been seeing on the screen.
 - Q: Chart copies are not printing to the clinics when placing med orders thru the GUI. I have the print parameters for Location set to print a chart copy to print to specific devices and under packages (still within the Location Print Parameter setup) to print outpatient meds to a specific device in Pharmacy. Orders are printing to pharmacy, however, the chart copies are not printing to the location (which happens to be clinic locations). Works ok in List Mgr. Question: Is the GUI capable of handlign this functionality?

- **A:** Printing of chart copies works in the GUI if the location is set up to auto-print. The GUI can't prompt for a chart copy print device. You may want to use the List Values option on the XPAR MENU TOOLS option to check the values for the parameters ORPF PROMPT FOR CHART COPY and ORPF CHART COPY PRINT DEVICE. If the values for the location in question are DON'T PROMPT and a valid device is listed, the chart copies should auto print.
- **Q:** How do you correct Vitals entered in error in the GUI?
- **A:** You have to enter a new order to replace the incorrect one. Since the Vitals/Measurement files will not store more than one of any one type of measurement for one encounter (patient, location, date/time), if you enter a new vital for the encounter, it replaces the old one.
- **Q:** When our clinicians are selecting an image type while ordering radiology exams in the GUI, they get a message box that says "not a valid integer value." It appears to be machine-specific (3 or more PCs are experiencing it). Any ideas?
- **A:** Two sites reported this problem. In one case it was Express Meter running as a local process on the workstations. They ended the EM32.EXE process on the local workstation and this resolved the problem. In the other case, it was the Microsoft Intellipoint program, and they removed POINT32.EXE to correct the problem.
- **Q:** Our CAC and others reported that when a name is typed in the Patient Selection box (before selection is entered), a display of the patient's SSN, DOB, and age automatically appears. This is not consistent with the way VistA handles sensitive patients. The appearance of the display is indiscriminate, and occurs for all types of patients. Can this be changed in a future version of the CPRS GUI?
- **A:** In doing some investigation in a roll-and-scroll as opposed to GUI, you see the same thing. In a roll-and-scroll, the following appears:

In roll-and-scroll, you still see the SSN, DOB, and Service connection as these are identifiers.

In the CPRS GUI, at the Patient Selection window, if the same patient is clicked on, we see just below and to the left of the OK and CANCEL buttons:

LEE, Sabrina SSN: 123-22-3456 DOB: Nov 11,1950 Female, age 48 Veteran

So both formats, although displayed differently, are showing the same data.

If this isn't the way you are seeing the lookup on the VistA side, it may be because you have a local modification in place to hide identifiers if the patient is sensitive.

MISS Position

Here is input from the security folks on this issue in relation to the CPRS GUI lookup—the original dialog as well as the response from MISS.

Original Message sent on May 1, 1998:

We had a site raise a concern about the way CPRS does the display of identifiers from the patient selection screen. I feel we're mimicking what is done on the roll and scroll (DPTLK) side of things, but I'd like to start a dialog.

When you type in a partial name or ?? in DPTLK, you get a list of choices to choose from. After the patient name, the date of birth, SSN, and patient type are displayed along with locally created identifiers. Nothing is stored. In the GUI, a list box is displayed of patient names. If you highlight the patient name, the above information displays to the right of the listbox. The site in question feels this is a confidentiality issue. Again, nothing is stored in terms of logging a hit on a sensitive record until the record is actually selected from the list. In MAS, this issue came up at least once a year. There were always requests for items to be left of when there was a sensitive patient involved. The problem was always pointed out was that not showing the information could lead to the wrong patient being selected. Additionally, it was pointed out that users sign an access agreement letter agreeing to not use the information in the system other than for official business. To my knowledge, no change was ever approved.

The particular site in question has modified DPTLK locally to NOT show any identifiers for a sensitive patient. They are asking for the same change to be made nationally with the GUI. I guess the bottom line is there are two issues:

- 1. Do you feel we are sufficiently mimicking what is in DPTLK?
- 2. Are there changes planned to DPTLK to address this issue?

Response from Sarah Daly, MISS: This is a frequently asked question by ISOs and employees. The purpose of presenting these data fields to users is to uniquely and unambiguously identify computer entries. In this case the data fields are people's

identifiers. This practice is established in tradition by long use in DHCP. This is a privacy issue only in the context that the information is used subsequently to invade the individual's privacy. The security issue is loss of confidentiality.

The following three paragraphs outline VHA's countermeasures against the threat of breach of confidentiality, including this instance of it.

- 1. VHA's information security program emphasizes training of all users. This includes sensitizing users to the responsibility they have for maintaining the confidentiality of information they access, view, and use. They are responsible for using these data in a pre- determined manner.
- 2. In addition, DHCP has technical mechanisms built in (password challenges, menus, keys, access attributes) that can limit access of data to only that set of users that need them in the discharge of their official duties. The system incorporates mechanisms for applying and reviewing audits of system events, including the ability to follow user activity. Facilities can apply additional security on locally-selected records to detect who accessed the records. This is the "sensitive record" review.
- 3. Finally, facility management has staff in place that manages all the training, technical, and administration components of the system. This includes periodic review of information security.

When combined with administrative and legal recourse that can be taken against violators, these mechanisms and procedures ensure that personal data are protected to the extent required to accommodate both privacy concerns and easy data access. The VA's O.G.C. (Office of the General Counsel) has provided an Advisory Opinion (AO 1-93) on this subject. They interpreted Privacy Act as allowing VA to use SSNs and dates of birth as identifiers to look up and select patients.

Order Checks and Notifications Troubleshooting

Key Options for Troubleshooting Notifications

Notification Mgmt Menu

Display the Notifications a User Can Receive Determine Recipients for a Notification Display Patient Alerts and Alert Recipients

Patient List Mgmt Menu
Display User's Teams
Display Patients Linked to a User via Teams

Key Option for Troubleshooting Order Checking

Order Checking Mgmt Menu
Display the Order Checks a User Can Receive

- **Q:** When I write an order for digoxin and quinidine at the same time, the order check does not seem to take place until after it would with an order check between a new med and an old one. Did I understand that correctly?
- A: Your observations are correct regarding the order checking against new meds vs. old meds. Almost all medication-related order checks are performed by querying the pharmacy package. During the ordering process, pharmacy does not know about the meds placed during the ordering session. Meds are not "released" to the pharmacy service until they have been signed so checks between meds placed in the session cannot occur. Checks against meds already released to Pharmacy occur within the ordering process. Checking is postponed until after the session is completed (just before electronic signature), because order checks are fairly resource-intensive and this minimizes the delays between prompts.
- **Q:** I'm having trouble disabling duplicate order checks. Can you give more information about how the different levels affect this?
- A: You can disable the duplicate order checks through the Order Checking Mgmt menu, option #1 Enable/Disable an Order Check. Do this at the Division level if the site is "multi-division"; otherwise, do it at the System level. Of course, if one of the users has the User level value set to "Enabled" they will still get the order check. Or if the patient Location value for the patient they are working with is "Enabled," they will get the Order Check. Or if the user's service has the value of "Enabled," users of that service will get that Order Check. Most Order Checks are exported with the Package level set to "Enabled."

Order Checks and Notifications Troubleshooting, cont'd

Q: Why don't some lab results produce notifications?

A: Some lab tests are not meant to be resulted. This is indicated in the Lab test file (#60) and the Orderable Items file (#101.43). In both files there is a field called TYPE. The field in both files is a set of codes which indicates if the lab test is to be resulted or not. The codes consist of I:Input, O:Output, B:Both and N:Neither. If the TYPE for a lab test in the Lab file or Orderable Item file is set to "I" or "N", results will not be sent by lab. This rarely is set incorrectly, but is something to look at when troubleshooting lab results-related notifications/alerts such as Lab Results, Abnormal Lab Results, and Critical Lab Results. If a lab results-related notification is not firing for a particular lab test, check the TYPE field for that test in the Lab Test and Orderable Items files. If it is "I" or "N" in either file, the results will not be posted via HL7 and the alert will not be sent.



NOTE: Both "Enabled" and "Mandatory" override lower-level entity values. Both override a system value of "Disabled." This was requested by users to reduce confusion over the two values and how they impact notification processing.

The lab series of alerts have been altered to work in conjunction as follows:

- 1. Users who work from lab results should have the Lab Results alert enabled and the Abnormal Lab Results alerts disabled.
- 2. All other users (most clinicians) should enable the Abnormal Lab Results (Action) or Abnormal Lab Results (Info) alerts and disable the Lab Results alert.
- 3. The Critical Lab Results alerts are usually mandatory and sent to everyone linked to the patient or the order.
- 4. Abnormal Lab Results (action) and Lab Results have follow-up actions that show the results of the order for abnormal/critical tests and normal tests. For most users, they should have one of these alerts enabled but not both.
- 5. Abnormal Lab Results (Info) and Critical lab results (Info) display the result and collection date/time in the message and have no follow-up.

With these alerts, users can get alerts for all or abnormal lab results, then see the actual results of the order via follow-up action. To supplement this, critical lab results are displayed.

Another item to remember is that alerts can be disabled for a patient location. This feature of CPRS was specifically included to reduce the number of abnormal and critical lab alerts for patients in critical care units like ICU. Patient location is enabled or disabled by the *Enable/Disable Notifications* option, then selecting "Location." This option is not available on end user Notification Mgmt menus, only via ORMGR and clinical coordinator menus.

Order Checks and Notifications Troubleshooting, cont'd

- **Q:** Is there is a way to downgrade a "critical" order check to "significant" so that an override reason is not required?
- **A:** To reduce the "Clinical Danger Level" of an order check, you need access to the Order Checking Management menu for managers. (This parameter is set at the Division or System level so it is not available to all users.) Under the Order Checking Mgmt menu select *Set Clinical Danger Level for an Order Check*. Depending on if you are setting it for a single site or more than one site in a consolidated system, select Division or System. Next enter DUP DRUG ORDER as the order check. Enter "Moderate" as the value. Only "High" valued order checks require an override reason. You should no longer be prompted for override reason for this order check.
- **Q:** In version 2.5, there was a Clinical Coordinator option in ORLB TEAM MGMT to: TRIGGER A TEST NOTIFICATION (ORB NOT TEST). This action option runs a routine which triggers a test notification. The notification is processed and sent to the identified recipient. Because the new notifications module is much more complex, I think having the ability to fire off a test alert would aid Clinical Coordinators & CPRS Mgrs in troubleshooting and assisting users.
- **A:** This already exists but with greatly extended flexibility. Try using the *Determine Recipients for a Notification* option under the Notification Mgmt menu. Another way to trigger a "test" notification/alert is to "flag" an existing order. The Order Requires Clarification alert will go to the provider who entered /requested the order. You could set up a test order on a test patient and flag/unflag the order forever to keep triggering the alert.

VI. Glossary

ASU Authorization/Subscription Utility, a utility that allows sites to

associate users with user classes, allowing them to specify the level of authorization needed to sign or order specific document types

and orderables.

Action A functional process that a clinician or clerk uses in the a List

Manager computer program. "Edit," "Create," and "Find" are

examples of actions.

Activate To make an inactive window active by clicking anywhere in it.

AICS Automated Information Collection System, formerly Integrated

Billing; software supported by MCCR, producing scannable

Encounter Forms.

Alerts Brief online notices that are issued to users as they complete a

cycle through the menu system. Alerts are designed to provide interactive notification of pending computing activities, such as the need to reorder supplies or review a patient's clinical test results. Along with the alert message is an indication that the View Alerts

common option should be chosen to take further action.

Application Coordinator (ADPAC)

A person at a hospital or clinic assigned to coordinate the automated data processing (ADP) activities in a specific department. This person is usually a specialist in his or her department (e.g., a medical technologist or a pharmacist) first and the applications coordinator second. These specialists are also known as Clinical Coordinators or Clinical Application

Coordinators (CAC) when they are associated with OE/RR, CPRS,

and clinical applications.

Application ProgramProgrammer calls provided for use by application ming Interface (API)

programmers. APIs allow programmers to carry o

programmers. APIs allow programmers to carry out standard computing activities without needing to duplicate Kernel utilities in their own packages. APIs also further Database Administration (DBA) goals of system integration by channeling activities, such as adding new users, through a limited number of callable entry

points.

Boilerplate Text A pre-defined Progress Notes or Discharge Summary template

containing standard text, with blanks to fill in for specific data

about a patient.

Broker See RPC Broker

Chart Copy A copy of all current orders that appear on a patient's

chart, using a pre-defined format. Each hospital can only have one format for Chart Copies. Chart copies can also be automatically printed on the ward. **This is the official**

copy for the medical record.

CIO Field Office Chief Information Office Field Office (formerly known as

IRMFOs-- Information Resource Management Field Office and ISCs – Information Systems Centers). **VISTA** has nine CIOFOs, each responsible for developing assigned application packages and for supporting the medical centers' VISNs within the IRMFO

region.

Client A single term used interchangeably to refer to the user, the

workstation, and the portion of the program that runs on the workstation. In an object-oriented environment, a client is a member of a group that uses the services of an unrelated group. If the client is on a local area network (LAN), it can share resources

with another computer (server).

Client Server A Network consisting of a workstation (client) and a **Architecture** central computer holding the database, linked by TCP/IP.

Clinician A doctor or other provider in a medical center who is authorized to

provide patient care.

Component In Progress Notes, Components are "sections" or "pieces" of

documents, such as Subjective, Objective, Assessment, and Plan in a SOAP Progress Components may have (sub)Components as items. They may have Boilerplate Text. Components may be

designated SHARED.

Consult/Request Also known as Consults. Consults can function as part of

of TIU). Consults are referrals of patients by the primary care physician to another hospital service/specialty, to obtain a medical opinion based on patient evaluation and completion of any procedures, modalities, or treatments the consulting specialist deems necessary to render a medical opinion. For instance, if a primary care physician orders a patient evaluation from Cardiology Service, and

CPRS, independently as a standalone package, or as part

the cardiology specialist orders an Electrocardiogram (EKG) to complete the evaluation and provide an opinion concerning the patient's condition, this type of order is

considered a "Consult."

Control An object in a window on the screen which the user can cause

action with visible results or change settings to modify a future

action.

COTS Commercial Off the Shelf; products not developed by VISTA.

Tracking

Events

Cover Sheet A screen of the CPRS patient chart that displays an

overview of the patient's record, with tabs at the bottom

representing components of a patient's chart.

CWAD Crises, Warnings, Allergies/Adverse Reactions, and

Advance Directives.

Discharge Summary A discharge summary is a formal synopsis of a patient's

medical care during a single hospitalization. It includes the pertinent diagnostic and therapeutic tests and procedures as well as the conclusions generated by those tests. A discharge summary is prepared for all discharges and transfers from a VA medical center or domiciliary or from nursing home care. The automated Discharge Summary module provides an efficient and immediate mechanism for clinicians to capture transcribed patient discharge summaries online, where they're available for

review, signing, adding addendum, etc.

DLL Dynamic Link Library. A DLL allows executable routines to be stored separately as files with a DLL extension. These routines are

only loaded when a program calls for them. DLLs provide several

advantages:

1. DLLs help save on computer memory, since memory is only

consumed when a DLL is loaded.

2. DLLs ease maintenance tasks. Because the DLL is a separate file, any modifications made to the DLL will not affect the operation of

the calling program or any other DLL.

3.DLLs help avoid redundant routines. They provide generic

functions that can be utilized by a variety of programs.

An object-oriented term that represents user actions that a GUI application interface recognizes, such as a mouse click or pressing

the down arrow key.

GUI Graphical User Interface. A type of display format that enables users

to choose commands, initiate programs, and other options by

selecting pictorial representations (icons) via a mouse or a keyboard.

Health Summary A VISTA product which can be viewed through CPRS. It includes

snapshots of part or all of a patient's tests and results (based on how

the site has it set up).

HL7 Communications standards/protocols to link different computer

systems together.

Icon A picture or symbol that graphically represents an object or a

concept.

IDCU The Integrated Data Communications Utility which is a wide area

network used by VA for transmitting data between VA sites.

Imaging A component of the patient chart; which includes

Radiology, X-rays, Nuclear Medicine, etc.

IRMS Information Resource Management Service. A service at VA medical

centers responsible for computer management and system security.

Modal A state or "mode" in which the user can only act or respond to a

single dialogue box or window. You must select a response before

you can exit or do anything else in the program.

Modeless The user is free to select and act in any window.

Namespacing A convention for naming VISTA package elements. The Database

Administrator (DBA) assigns unique character strings for package developers to use in naming routines, options, and other package elements so that packages may coexist. The DBA also assigns a

separate range of file numbers to each package.

Notifications Alerts regarding specific patients that appear on the

CPRS patient chart.

OCIO Office of the Chief Information Officer, located in Washington, D.C.

All CIO Field Offices ultimately report to this entity, which is subordinate to the Office of the Undersecretary for Health.

Object-Based Programming

Involves the use of components.

Object-Oriented Involves the creation of components. These

Programming components are self contained collections of data structures and

routines that interact with other components or objects.

OE/RR Order Entry/Results Reporting; a generic package developed to

interface with all VISTA packages, now part of CPRS.

Orderable Items Orderable items correspond to those services or products

that may be requested and provided by the patient care services; can be things such as a lab test, an imaging procedure, or a medication. The ORDERABLE ITEM file (#101.43) contains the orderable items for each service; CPRS uses orderable items to identify the

specific thing that has been ordered.

Patient Postings A component of the patient chart; includes messages

about patient; an expanded version of CWAD (see

above).

PCE Patient Care Encounter; a VISTA program that's part of the

Ambulatory Data Capture Project (ADCP), and also provides Clinical Reminders, which appear on Health Summaries.

PCMM Patient Care Management Module, a **VISTA** product that

manages patient/provider lists.

Print Formats

Service copy Copies of orders and actions for a particular service that can

be printed upon request for the use of that service. The service copy can also be set up for automatic printing at a defined location (usually in the service). Contains header,

body, and footer.

Chart Copy A copy of all current orders that appear on a patient's chart,

using a pre-defined format. Each hospital can only have one

format for Chart Copies. Chart copies can also be

automatically printed on the ward. This is the official copy

for the medical record.

Work Copy A working copy of order(s) that will be kept

Requisition A working copy of order(s) that will be sent with the order

to the service.

Label A copy of the order that is printed on a label to be stuck on the

container of the order (e.g., a medication or a lab sample).

Progress NotesThe Progress Notes module of TIU is used by health care givers to

enter and sign online patient progress notes and by transcriptionists to enter notes to be signed by caregivers at a later date. Caregivers may review progress notes online or print progress notes in chart

format for filing in the patient's record.

Remote Procedure Call A remote procedure call (RPC) is essentially some M code that may

take optional parameters to do some work and then return either a

single value or an array back to the client application.

RPC Broker Tools to facilitate communications between M and windows.

Requisition A working copy of order(s) that will be sent with the order

to the service.

Resource In VISTA, a method that enables sequential processing of tasks. The

processing is accomplished with a RES device type designed by the application programmer and implemented by IRM. The process is

controlled via the RESOURCE file (#3.54).

Semi-modal A window or dialogue box that will yield focus to the parent window

for some limited processing. Typically, semi-modal dialogue boxes

remain in the foreground even after yielding focus.

Server The computer where the data and the Business Rules reside. It makes

resources available to client workstations on the network. In **VISTA**, it is an entry in the OPTION file (#19). An automated mail protocol that is activated by sending a message to a server at another location with the "S.server" syntax. A server's activity is specified in the OPTION file (#19) and can be the running of a routine or the

placement of data into a file.

Service Copy Copies of orders and actions for a particular service that can be printed

upon request for the use of that service. The service copy can also be set up for automatic printing at a defined location (usually in the

service). Contains header, body, and footer.

TIU Text Integration Utilities, a VISTA package which contains Consults

Results, Progress Notes, and Discharge Summary. Other text-based packages can use its database structure and upload utilities. Consults

and CPRS both have interfaces with TIU.

Usability The ease and comfort a program provides to people. Programs that

are user-centered rather than machine or programmer-centered.

User Class The basic component of ASU (Authorization/ Subscription Utility).

The User Class file contains the different categories of users within a hospital. ASU allows sites to designate who is authorized to do what.

User-Centered A program designed to match the way people do things

User Interface The way the package is presented to the user, such as Graphical User

Interfaces that display option prompts, help messages, and menu choices, the List Manager User Interface (described at the beginning of this manual), and the roll and scroll interface, the traditional **VISTA**

terminal-based user interface.

VHA Veterans Health Administration

VISN Veterans Integrated Service Networks, geographic groupings of VA

Medical Centers which together share resources and collaborate to maximize use of resources and efficiently meet the needs of veterans

in their service areas.

VISTA (VHA Information Systems & Technology Architecture, formerly

DHCP (Decentralized Hospital Computer Program), the VA's comprehensive, integrated, medical center computer system. It consists of hardware, software packages, and comprehensive support for system-wide and station-specific, clinical and administrative au-

tomation needs.

Window An object on the screen that presents information such as a

document or message.

VA and VISTA Acronyms

Acronym	Meaning
AAC	Austin Automation Center
AACS	Automated Allocation & Control System
AC	Ambulatory Care
ACG	Ambulatory Care Group (from Provider Profiling Project – VISN 20)
ACIS	Ambulatory Care Information System (formerly PACE)
ACOS	American College of Surgeons
ACRP	Ambulatory Care Reporting Project
ADP	Automated Data Processing
ADPAC	Automated Data Processing Application Coordinator
AEMS	Automated Medical Equipment Reporting System (Engineering)
AICS	Automated Information Collection System v.3.0
AMIA	American Medical Informatics Association
AMIE	Automated Medical Information Exchange
AMIS	Automated Management Information System
ANSI	American National Standards Institute
ANSOS	a Nursing Scheduling COTS
AP	Anatomic Pathology
API	Application Programming Interface
AR	Accounts Receivable
ART	Adverse Reaction Tracking V. 4.0, formerly Allergy Tracking System
AR/WS	Automatic Replenishment/Ward Stock (a Pharmacy module)
ASI	Addictive Substance Interview
ASU	Authorization/Subscription Utility
BBS	Bulletin Board System
BDK	Broker Development Kit
BEST	Business Enterprise Solutions & Technologies Service
C&P	Compensation & Pension
CAC	Clinical Application Coordinator
CAIRO	Center for Applied Research and Operations
CALM	Centralized Accounting for Local Mgmt (replaced by FMS)
CAT	Computerized Axial Tomography
CBOC	Community Based Outpatient Clinics
CIO	Chief Information Officer
CIOFO	Chief Information Office Field Office
CIRN	Clinical Information Resources Network
СМОР	Consolidated Mail Outpatient Pharmacy
CMR	Consolidated Memorandum of Receipt Official (new official for IFCAP
COD	w/Eqpmt Turn-In/Request Module) Clinical Objects Dictionary (w/b nat'l VHA std vocab for clin concepts)
	Meaning
Acronym	Meaning

cos	Chief of Staff
COTS	Commercial Off-the-shelf products
CPRS	Computerized Patient Record System - formerly OE/RR
CPT	Current Procedural Terminology
CPU	Central Processing Unit
DEA	Drug Enforcement Agency
DHCP	Decentralized Hospital Computer Program
Diloi	Dynamic Host Control/Configuration/Communication Protocol
D&PPM	Drug and Pharmaceutical Products Mgmt V. 2.0
DLL	Dynamic Link Library (file)
DMMS	Decentralized Medical Management System
DNS	Domain Name Service (for locating Internet addresses)
DOB	Date of Birth
DoD	Department of Defense
DOD	Date of Death
DOM	VA Domiciliary
DPC	Austin Data Processing Center
DSM	Digital Standard MUMPS
DSM-IV	Diagnostic & Statistical Manual of Mental Disorders, 4th edition
DSS	Decision Support System
DSS	Document Storage Systems (vendor)
DUE	Drug Use Evaluation
EDR	Event Driven Reporting
E3R	Electronic Error and Enhancement Report (on Forum)
EIS	Executive Information System
EPI	Emerging Pathogens Initiative
EUCLID	a site-developed (Boise VAMC) computerized patient record system
FIPS	Federal Information Processing Standards
FIRMAC	Field Information Resource Mgmt Advisory Committee
FM	VA FileMan
FMS	Financial Management System
FTEE	Full-time Employee Equivalent
FTP	File Transfer Protocol
GAO	General Accounting Office
G-CPRS	Government Computerized Patient Record System, a VA, DOD, HIS
00500	project to integrate the automated patient record
GRECC	Geriatric Research, Education and Clinical Center
GUI	Graphical User Interface
HBHC	Hospital-Based Home Care
HCFA	Health Care Financing Administration
HEC	Health Eligibility Center
HIMSS	Health Information Management System Society
Acronym	Meaning
HINQ	Hospital INQuiry

HL7	Health Level 7, an international communications protocol. Also refers to
1167	the VISTA infrastructure package, which facilitates use of this messaging
	system.
HLLP	Hybrid Lower Level Protocol
HOST	Hybrid Open Systems Technology
HSR&D	Health Services Research & Development
IB	Integrated Billing
ICD-9	International Classification of Diseases, 9th ed.
ICR	Immunology Case Registry
IDCU	Integrated Data Communications Utility
IFCAP	Integrated Funds Distribution, Control Point Activity
IG	Inspector General
IHS	Indian Health Service or Integrated Hospital System (HOST)
IP	Internet Protocol
IRA	Initial Request Analysis
IRM	Information Resources Management
IRT	Incomplete Record Tracking
IVM	Income Verification Matching
JCAHO	Joint Commission on Accreditation of Hospitals
KIDS	Kernel Installation & Distribution System
LEDI	Laboratory Electronic Data Interchange (a new module of Lab that allows
	labs to send data to each other)
LOINC	Logical Obsvtn Id'r Nms & Codes (standard scheme for coding Lab tests)
MAR	Medical Administration Record(s)
MAS	Medical Administration Service - now PIMS
MCCR	Medical Care Cost Recovery
MDC	M Development Committee
MediPhor	Clinical workstation commercial product - HOST
MIME	Multimedia Internet Mail Extensions
MIS	Medical Information Section
MISD	Management Infrastructure Development (Albany, San Francisco, Wash DC CIO Field Offices)
MIT	Means Test Indication
MPD	Minimal Patient Dataset
MPI	Master Patient Index (was Master Veteran Record)
MRT	Medical Record Technician
MRTS	Messaging Routing and Translation System
MSM	Micronetics Standard MUMPS (replaced by OpenM/Avanti)
MUMPS	Massachusetts General Hospital Utility Multiprogramming (now M)
MVR	Master Veteran Record (now Master Patient Index)
NANDA	Nursing terminology coding scheme
Acronym	Meaning
NDF	National Drug File
NLT	National Laboratory Test

NOIS	National On-line Information Sharing system
NPCDB	National Patient Care Data Base
NPF	New Person File
NTEO	National Training & Education Office (of OCIO)
NVS	National VISTA Support (formerly Customer Support), part of Customer Services
ODBC	Open Database Connectivity
OE/RR	Order Entry / Results Reporting - now CPRS
OIG	Office of Inspector General
OPC	Outpatient Clinic
PAID	Personnel & Accounting Integrated Data
PANDAS	Patient Encounter Data Acquisition System
PCE	Patient Care Encounter
PCHS	Federal equipment purchasing contract
PCMM	Primary Care Management Module
PDM	Pharmacy Data Management
PDX	Patient Data Exchange
PFOP	Personal Funds of Patients
PGY 1-10	Medical student status defined by Academic Affairs
PIMS	Patient Info Mgmt System (?) - formerly MAS (AD/R) & SD
PL	Problem List
PM&R	Physical Medicine & Rehabilitation Services
PMIS	Patient Medication Information Sheet
PN	Progress Notes
PPP	Pharmacy Prescription Practices/Package
PRD	Product Requirements Document
PRS	Procurement of Automated Information Resources Solutions
PTF	Patient Treatment File
QUIC	Quality Improvement Checklist
RAM	Random Access Memory
ROES	Remote Order Entry System
RPC	Remote Procedure Call
SCD	Spinal Cord Dysfunction Registry
SISP	(VHA) Strategic Information Systems Plan
SNOMED	Systematized Nomenclature of Medicine
SOAP	Strategic Objective Assessment Plan for patient treatment plan
SP	Surgical Pathology
SQL	Structured Query Language
SRS	Software Requirement Specification
Acronym	Meaning
T&A	Time and Attendance
T&L	Time & Leave Unit
TCP/IP	Transmission Control Protocol/Internet Protocol
TIU	Text Integration Utilities

UCI	User Class Identification: a computing area or account
UD	Unit Dose Pharmacy
UI	Universal Interface, replacement system for Lab's LSI)
UMLS	Universal Medical Language System
UR	Utilization Review
VA	Department of Veterans Affairs
VACO	VA Central Office (headquarters)
VADDC	VA Denver Distribution Center
VALNET	VA Library Network
VARO	VA Regional Office
VHA	Veterans Health Administration
VIC	Veterans Identification Card
VISN	Veterans Integrated Service Network(s)
VISTA	Veterans Health Information System & Technology Architecture
VS	Vital Signs
WLN	Western Library Network
WWW	World Wide Web
YOB	Year of Birth

Appendix A: Order Set Examples

Samples of West Palm Beach order sets

NOTE: West Palm Beach enters "AXA" as the first letters of their order sets, as a distinguishing designation.

ER Order Menu:

Menu:	AXA ER LAB ORDERS				Column Width: 26
1		2		3	4
	CARDIAC	15	ASAP AMYLASE	43	STAT URINALYSIS
1	STAT CBC + DIFF	16	LIPASE		
2	STAT CHEM 7	17	STAT PT/PTT		DIABETIC
3	STAT CALCIUM	18	STAT URINALYSIS	61	STAT CBC + DIFF
+4	STAT MAGNESIUM			62	STAT CHEM 7
5	STAT ALBUMIN		ETOH/DRUG INGESTION	63	ASAP ACETONE
6	STAT PT/PTT	31	STAT CBC + DIFF	64	STAT URINALYSIS
7	STAT URINALYSIS	32	STAT CHEM 7	65	RT orders (abg gas)
8	CK AND CK-MB	33	STAT ETOH LEVEL		
1		34	STAT TOX PROFILE PLU	S	ADDITIONAL
	GI	35	STAT URINALYSIS	90	BLOOD CULTURE
11	STAT CBC + DIFF	36	STAT PT/PTT	91	BLOOD CX X 2 (15MIN)
12	STAT CHEM 7	37	STAT CALCIUM		
13	ASAP LIVER 1	38	STAT MAGNESIUM	97	Microbiology
+14	ASAP LIVER 2	39	STAT LIVER 1	98	Laboratory
		40	STAT LIVER 2	99	Lab Tests by Name

Rheumatology Order Sets Menu:

- 1 Methtrexate Panel
- 2 Gold Panel
- 3 Initial Rheumatology Panel
- 4 Comprehensive Rheumatology Panel
- 5 Osteoporosis Panel
- Synovial Fluid Panel

General Admission Order Set:

1	Admit to	11	Inpatient Meds PRN
2	Diagnosis	12	IV Fluids
3	Condition	13	Laboratory
4	Enter/Edit Patient Allergies	14	Lab Order Sets
5	Dietetic Orders	15	Imaging
6	Activity/Privileges	16	Consults
7	Vital Signs	17	Attending MD for care of Patient
8	Nursing Care	18	Code Status (DNR)
9	Isolation / Precautions		
1.0	Inpatient Medications		

Psychiatry Admission Order Set:

1 2 3 4 5	Admit to Diagnosis Mental Health Condition Enter/Edit Patient Allergies Dietetic Orders	13 14 15 16 17	Mental Health Lab Order Sets Imaging Consults MH Discharge Data
6 7	Mental Health Activity Order Vital Signs		
8	Nursing Care	30	Streichenwein Admit
9	Seclusion/Restraint	31	Streichenwein Detox
10	Isolation / Precautions	32	Mental Health Observation Orders
11	MH PRN medication		
12	Laboratory		

Detox Admission Order Set:

1	Admit to 4C	14	KAOLIN/PECTIN 30ML MAX 6/DAY
2	Diagnosis	15	PYRIDOXINE 50MG PO QD
3	Dietetic Orders	16	MAGNESIUM OXIDE 400MG PO BID
4	Allergies	17	MULTIVITAMIN 1 TAB PO QD
5	Mental Health Activity Order	18	FOLIC ACID 1MG PO QD
6	Vital Signs MH	19	THIAMINE 100MG PO QD
7	Lab: Routine admission	20	Librium 25mg PO QID X 24h (day 1)
8	CHEST	21	Librium 25mg PO TID X 24h (day 2)
9	Electrocardiogram	22	Librium 25mg PO BID X 24h (day 3)
10	MOM 60ML BID PRN	23	Librium 25mg PO once (day 4)
11	AL/MG OH SUSP 15ML PO Q2H PRN		
12	ACETAMINOPHEN 650MG PO Q4H PRN	25	Librium 50mg PO q4h prn X 96h
13	DIPHENHYDRAMINE 50MG PO OHSPRN		

This is what Order Sets look like in the Order Dialog file:

```
RENAL:
NAME: AXA RENAL DIALYSIS
                                        DISPLAY TEXT: Dialysis Order Set
                                        SIGNATURE REQUIRED: ORES
 TYPE: order set
  PACKAGE: ORDER ENTRY/RESULTS REPORTING
  CREATE PARENT ORDER: NO
                                        DISPLAY SUBHEADER: YES
                                        ITEM: LRTZ MH/IM CBC BLOOD LAVENDER
SEQUENCE: 1.1
SEQUENCE: 2.1
  ITEM: LRTZ MH/IMZ IM DIFF COUNT (BLOOD) BLOOD LAVENDER
SEOUENCE: 7.1
 ITEM: LRTZ IM PROTEIN, TOTAL SERUM MARBLED
                                        ITEM: LRTZ IM ALBUMIN SERUM MARBLED
SEQUENCE: 8.1
SEQUENCE: 9.1
                                        ITEM: LRTZ MH/IM ALT SERUM MARBLED
SEQUENCE: 10.1
                                        ITEM: LRTZ IM AST SERUM MARBLED
SEQUENCE: 11.1
                                        ITEM: LRTZ IM LDH SERUM MARBLED
SEQUENCE: 12.1
  ITEM: LRTZ IM ALKALINE PHOSPHATASE SERUM MARBLED
SEOUENCE: 13.1
                                        ITEM: LRTZ IM CALCIUM SERUM MARBLED
SEOUENCE: 15.1
                                        ITEM: LRT CHEM 7 SERUM MARBLED
SEQUENCE: 3.1
                                        ITEM: LRT IRON GROUP SERUM MARBLED
SEQUENCE: 4.1
                                        ITEM: LRT BILIRUBIN, TOTAL SERUM MARBLED
SEQUENCE: 5.1
                                        ITEM: LRT URIC ACID SERUM MARBLED
                                        ITEM: LRT PHOSPHORUS SERUM MARBLED
SEQUENCE: 6.1
SEQUENCE: 14.1
                                        ITEM: LRT CHOLESTEROL SERUM MARBLED
SEQUENCE: 16.1
                                       ITEM: LRT MAGNESIUM SERUM MARBLED
SEQUENCE: 17.1
                                       ITEM: LRT FERRITIN SERUM MARBLED
NAME: LRTZ MH/IM CBC BLOOD LAVENDER DISPLAY TEXT: CBC
                                       DISPLAY GROUP: CHEMISTRY
 TYPE: quick order
  SIGNATURE REQUIRED: ORES
                                       PACKAGE: LAB SERVICE
  VERIFY ORDER: NO
                                        ASK FOR ANOTHER ORDER: NO
ITEM ENTRY: 1
                                        DIALOG: OR GTX ORDERABLE ITEM
                                        VALUE: 394
 INSTANCE: 1
                                        DIALOG: OR GTX COLLECTION SAMPLE
ITEM ENTRY: 7
 INSTANCE: 1
                                        VALUE: 3
                                        DIALOG: OR GTX SPECIMEN
ITEM ENTRY: 8
  INSTANCE: 1
                                        VALUE: 70
NAME: LRTZ IM ALBUMIN SERUM MARBLED DISPLAY TEXT: ALBUMIN
  TYPE: quick order
                                       DISPLAY GROUP: CHEMISTRY
SIGNATURE REQUIRED: ORES
                                    PACKAGE: LAB SERVICE
  VERIFY ORDER: NO
                                       ASK FOR ANOTHER ORDER: NO
ITEM ENTRY: 1
                                        DIALOG: OR GTX ORDERABLE ITEM
                                        VALUE: 1400
 INSTANCE: 1
ITEM ENTRY: 7
                                        DIALOG: OR GTX COLLECTION SAMPLE
                                        VALUE: 1
 INSTANCE: 1
ITEM ENTRY: 8
                                        DIALOG: OR GTX SPECIMEN
  INSTANCE: 1
                                        VALUE: 72
NAME: LRTZ MH/IM ALT SERUM MARBLED DISPLAY TEXT: ALT
  TYPE: quick order
                                       DISPLAY GROUP: CHEMISTRY
  SIGNATURE REQUIRED: ORES
                                        PACKAGE: LAB SERVICE
  VERIFY ORDER: NO
                                        ASK FOR ANOTHER ORDER: NO
ITEM ENTRY: 1
                                        DIALOG: OR GTX ORDERABLE ITEM
                                        VALUE: 1403
  INSTANCE: 1
ITEM ENTRY: 7
                                       DIALOG: OR GTX COLLECTION SAMPLE
 INSTANCE: 1
                                       VALUE: 1
                                       DIALOG: OR GTX SPECIMEN
ITEM ENTRY: 8
  INSTANCE: 1
                                        VALUE: 72
```

DISPLAY TEXT: AST NAME: LRTZ IM AST SERUM MARBLED TYPE: quick order DISPLAY GROUP: CHEMISTRY SIGNATURE REQUIRED: ORES PACKAGE: LAB SERVICE ASK FOR ANOTHER ORDER: NO VERIFY ORDER: NO ITEM ENTRY: 1 DIALOG: OR GTX ORDERABLE ITEM INSTANCE: 1 VALUE: 1404 ITEM ENTRY: 7 DIALOG: OR GTX COLLECTION SAMPLE VALUE: 1 INSTANCE: 1 ITEM ENTRY: 8 DIALOG: OR GTX SPECIMEN INSTANCE: 1 VALUE: 72 NAME: LRTZ IM LDH SERUM MARBLED DISPLAY TEXT: LDH TYPE: quick order DISPLAY GROUP: CHEMISTRY SIGNATURE REQUIRED: ORES PACKAGE: LAB SERVICE VERIFY ORDER: NO ASK FOR ANOTHER ORDER: NO DIALOG: OR GTX ORDERABLE ITEM ITEM ENTRY: 1 INSTANCE: 1 VALUE: 1414 DIALOG: OR GTX COLLECTION SAMPLE ITEM ENTRY: 7 INSTANCE: 1 VALUE: 1 ITEM ENTRY: 8 DIALOG: OR GTX SPECIMEN INSTANCE: 1 VALUE: 72 NAME: LRTZ IM CALCIUM SERUM MARBLED DISPLAY TEXT: CALCIUM TYPE: quick order DISPLAY GROUP: CHEMISTRY SIGNATURE REQUIRED: ORES PACKAGE: LAB SERVICE VERIFY ORDER: NO ASK FOR ANOTHER ORDER: NO ITEM ENTRY: 1 DIALOG: OR GTX ORDERABLE ITEM INSTANCE: 1 VALUE: 1406 ITEM ENTRY: 7 DIALOG: OR GTX COLLECTION SAMPLE VALUE: 1 INSTANCE: 1 ITEM ENTRY: 8 DIALOG: OR GTX SPECIMEN INSTANCE: 1 VALUE: 72 NAME: AXA RHEU METHOTREXATE PANEL DISPLAY TEXT: Methtrexate Panel TYPE: order set SIGNATURE REQUIRED: ORES PACKAGE: ORDER ENTRY/RESULTS REPORTING CREATE PARENT ORDER: NO DISPLAY SUBHEADER: YES SEOUENCE: 1.1 ITEM: LRT CBC BLOOD LAVENDER ITEM: LRT AST (SGOT) SERUM MARBLED SEQUENCE: 2.1 SEQUENCE: 3.1 ITEM: LRT ALKALINE PHOSPHATASE SERUM MARBLED NAME: AXA RHEU GOLD PANEL DISPLAY TEXT: Gold Panel TYPE: order set SIGNATURE REQUIRED: ORES PACKAGE: ORDER ENTRY/RESULTS REPORTING CREATE PARENT ORDER: NO DISPLAY SUBHEADER: YES SEQUENCE: 1.1 ITEM: LRT CBC BLOOD LAVENDER SEQUENCE: 2.1 ITEM: LRT URINALYSIS URINE NAME: AXA RHEU INITIAL RHEU PANEL DISPLAY TEXT: Initial Rheumatology Panel TYPE: order set SIGNATURE REQUIRED: ORES PACKAGE: ORDER ENTRY/RESULTS REPORTING CREATE PARENT ORDER: NO DISPLAY SUBHEADER: YES SEQUENCE: 1.1 ITEM: LRT ANA SERUM MARBLED SEQUENCE: 2.1 ITEM: LRT RHEUMATOID FACTOR SERUM MARBLED SEQUENCE: 3.1 ITEM: LRT TSH SERUM MARBLED SEQUENCE: 4.1 ITEM: LRT CK TOTAL SERUM MARBLED SEQUENCE: 5.1 ITEM: LRT SED RATE BLOOD LAVENDER

```
NAME: AXA RHEU COMPREHENSIVE PANEL
  DISPLAY TEXT: Comprehensive Rheumatology Panel
  TYPE: order set
                                        SIGNATURE REQUIRED: ORES
  PACKAGE: ORDER ENTRY/RESULTS REPORTING
  CREATE PARENT ORDER: NO
                                        DISPLAY SUBHEADER: YES
SEQUENCE: 1.1
  ITEM: LRT ANTI-DNA (DOUBLE STRANDED) SERUM MARBLED
SEOUENCE: 2.1
  ITEM: LRT ANTI-EXTRACTABLE NUCLEAR ANTIGEN SERUM MARBLED
SEQUENCE: 3.1
  ITEM: LRT SJOGREN ANTIBODY SERUM MARBLED
                                        ITEM: LRT COMPLEMENT C3 SERUM MARBLED
SEQUENCE: 4.1
SEQUENCE: 5.1
                                        ITEM: LRT COMPLEMENT C4 SERUM MARBLED
NAME: AXA RHEU OSTEOPOROSIS PANEL
                                        DISPLAY TEXT: Osteoporosis Panel
  TYPE: order set
                                        SIGNATURE REQUIRED: ORES
  PACKAGE: ORDER ENTRY/RESULTS REPORTING
 CREATE PARENT ORDER: NO
                                        DISPLAY SUBHEADER: YES
SEQUENCE: 1.1
                                        ITEM: LRT CALCIUM SERUM MARBLED
SEQUENCE: 2.1
                                        ITEM: LRT MAGNESIUM SERUM MARBLED
SEQUENCE: 3.1
                                        ITEM: LRT PHOSPHORUS SERUM MARBLED
SEQUENCE: 4.1
                                        ITEM: LRT ALBUMIN SERUM MARBLED
SEQUENCE: 5.1
                                        ITEM: LRT PROTEIN, TOTAL SERUM MARBLED
SEOUENCE: 6.1
                                        ITEM: LRT THYROID PROFILE SERUM MARBLED
SEQUENCE: 7.1
  ITEM: LRT ALKALINE PHOSPHATASE SERUM MARBLED
SEOUENCE: 8.1
                                        ITEM: LRT AST (SGOT) SERUM MARBLED
SEQUENCE: 9.1
                                        ITEM: LRT TESTOSTERONE SERUM
MARBLED
SEQUENCE: 10.1
  ITEM: LRT LEUTENIZING HORMONE SERUM MARBLED
                                        ITEM: LRT 25 OH VITAMIN D SERUM MARBLED
SEQUENCE: 11.1
NAME: AXA RHEU SYNOVIAL FLUID PANEL
                                        DISPLAY TEXT: Synovial Fluid Panel
  TYPE: order set
                                        SIGNATURE REQUIRED: ORES
  PACKAGE: ORDER ENTRY/RESULTS REPORTING
  CREATE PARENT ORDER: NO
                                        DISPLAY SUBHEADER: YES
SEQUENCE: 1.1
 ITEM: LRT CELL COUNT (FLUID) SYNOVIAL FLUID LAVENDER
SEQUENCE: 2.1
  ITEM: LRT SYNOVIAL CULTURE SYNOVIAL FLUID STERILE
SEQUENCE: 3.1
  ITEM: LRT SYNOVIAL FLUID CRYSTALS SYNOVIAL FLUID LAVENDER
```

Appendix B: West Palm Beach's description for GUI menu creation

```
Subj: GUI Order Menus [#29274058] 24 Mar 99 07:33 247 lines
From: BEARD, DEWAINE (West Palm Beach) 1 of 1 response read. In 'IN' basket.
Page 1
```

As requested on the CPRS call yesterday, here are some differences between the two XPAR parameters that control what appears in the Write Orders box on the Orders tab of the CPRS GUI.

The GUI is distributed with the standard ordering dialogs entered into the ORWOR WRITE ORDERS LIST parameter at the Package level.

Example:	
Sequence	Value
20	GMRAOR ALLERGY ENTER/EDIT
30	FHW1
52	PSJ OR PAT OE
55	PSO OERR
58	PSJI OR PAT FLUID OE
60	LR OTHER LAB TESTS
70	RA OERR EXAM
80	GMRCOR CONSULT
85	GMRCOR REQUEST
90	GMRVOR
99	OR GXTEXT WORD PROCESSING ORDER

The advice nationally has been to add/delete from this list or to build a customized list at the System level. This is what West Palm Beach and many others sites have done.

Example:	
Sequence	Value
2	GMRAOR ALLERGY ENTER/EDIT
5	FHW1
7	GMRVOR
10	PSJ OR PAT OE
15	PSJI OR PAT FLUID OE
20	PSO OERR
21	ORZ GMENU GUI RXOP MAIN MENU
25	LR OTHER LAB TESTS
26	ORZ GMENU GUI LAB QUICK
28	ORZ GMENU GUI LAB ONCE
30	RA OERR EXAM
40	OR GXTEXT WORD PROCESSING ORDER
44	ORZ GMENU GUI CONSULTS MAIN
47	ORZ GMENU GUI ER MAIN
50	ORZ ADD MENU CLINICIAN

Some noted limitations/problems with this approach include: #1. Maintanence! The XPAR menu is difficult for even IRM staff to get to, it is not very friendly (there is no edit template for ORWOR WRITE ORDERS LIST), and thus the CACs generally cannot maintain what appears there.

#2. Need for care when controlling what folks see. If you have a group of users that you want to limit access or give special access to, you must re-enter all items you want them to have at the individual USER level.

(possible E3R or NOIS for the enterprising--the Location level does not appear to have any effect on the limited tests I have done)

Some ways around these limitations can be found by using the approach pioneered in VISN 8 by CACs Ruth Gorman and Regina Crane with the fantastic support of their IMS support Prima! During testing for CPRS they discovered that if you put an add order screen into the XPAR parameter ORWDX WRITE ORDERS LIST, that the contents of that menu appear in the Write Orders box on the Orders Tab of CPRS GUI.

This parameter is also a bit more flexible because where you can assign ORWOR WRITE ORDERS LIST only to Package, System, Location and User, ORWDX WRITE ORDERS LIST can be assigned to System, Division, and User. Since Gainesville and Lake City are integrated, the divisional parameter was particularly useful for them.

This made maintainence a breeze for the CACs because they only had to edit the menu through their CAC tools (Menu Management) and the changes would be reflected in the GUI--no IRM involvement.

While IRM still needs to help when you are restricting/changing access for individual users... once a user has an individual or group menu assigned via this parameter, any subsequent changes you might need to make to them can easily be made by simply editing the contents of the menu they have assigned to them.

An example of how this parameter entry looks:
Select PARAMETER DEFINITION NAME: ORWDX WRITE ORDERS LIST Menu

ORWDX WRITE ORDERS LIST may be set for the following:

2	User	USR	[choose from NEW PERSON]
7	Division	DIV	[WEST PALM BEACH, FL]
8	System	SYS	[WEST-PALM.VA.GOV]

Enter selection: 2 User NEW PERSON
Select NEW PERSON NAME: beard, dewaine L DLB

----- Setting ORWDX WRITE ORDERS LIST for User: BEARD, DEWAINE L - Order Dialog: orz add menu test

- 1 ORZ ADD MENU TEST
- 2 ORZ ADD MENU TEST COFFEY
- 3 ORZ ADD MENU TEST2
- 4 ORZ ADD MENU TESTING MODE

CHOOSE 1-4: 1 ORZ ADD MENU TEST

ORWDX WRITE ORDERS LIST may be set for the following:

2	User	USR	[choose from NEW PERSON]
7	Division	DIV	[WEST PALM BEACH, FL]
8	System	SYS	[WEST-PALM.VA.GOV]

Now you will ask me... it is four months down the road and a user is calling with a problem, how can I figure out which menu they have assigned in the GUI? Great question!!!

That used to be held directly in the new person file, then it moved to the Parameter file... so... In fileman (or your IRM can make an option for you) can do a search or a print or enter edit. For me, right now, I get the most reliable results from enter/edit, even though it is a bit of a pain. (mostly because my searches come up empty--grin) I am in to test many things and I have set many of my own personal parameters to see how they work so that I can teach others, so my list is very long! A "Common User" would have a shorter list (Typically <20). Anyway, here is your example using me, I hope this helps!

Enter or Edit File Entries
Print File Entries
Search File Entries
Modify File Attributes
Inquire to File Entries
Utility Functions ...
Data Dictionary Utilities ...
Transfer Entries
Other Options ...

You have PENDING ALERTS

Enter "VA VIEW ALERTS to review alerts

Select VA FileMan Option: ENTER or Edit File Entries

INPUT TO WHAT FILE: PARAMETERS// EDIT WHICH FIELD: ALL//

```
Select PARAMETERS ENTITY: BEARD BEARD, DEWAINE L
                                                      DLB
                                                                 711
       ...OK? Yes// (Yes)
                 OR ADD ORDERS MENU
                  ORLP DEFAULT PROVIDER
                  ORLP DEFAULT LIST ORDER
                  ORLP DEFAULT TEAM
                 ORLP DEFAULT CLINIC MONDAY
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5:
     6
                  ORLP DEFAULT CLINIC TUESDAY
     7
                  ORLP DEFAULT CLINIC WEDNESDAY
     8
                 ORLP DEFAULT CLINIC THURSDAY
                                                   1
                 ORLP DEFAULT CLINIC FRIDAY
                 ORLP DEFAULT CLINIC SATURDAY
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-10:
                 ORLP DEFAULT CLINIC SUNDAY
    11
                  ORLP DEFAULT CLINIC START DATE
    13
                 ORLP DEFAULT CLINIC STOP DATE
                 ORB SORT METHOD
                  ORWCH BOUNDS
                                  frmFrame
Press <RETURN> to see more, '^' to exit this list, OR
```

```
CHOOSE 1-15:
                  ORWCH WIDTH frmProblems.pnlLeft
ORWCH WIDTH frmOrders.pnlLeft
ORWCH WIDTH frmNotes.pnlLeft
ORWCH WIDTH frmConsults.pnlLeft
ORWCH WIDTH frmDCSumm.pnlLeft
     16
     17
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-20:
                  ORWCH WIDTH frmLabs.pnlLeft frmReports.pnlLeft
     2.1
     22
                                  frmReports.pnlLeft
     23
                  ORWCH COLUMNS
                                    frmOrders.hdrOrders
                  ORWCH COLUMNS
                                     frmMeds.hdrMedsIn
                  ORWCH COLUMNS
                                    frmMeds.hdrMedsOut
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-25:
     26
                  ORLP DEFAULT WARD
     27
                  ORB PROCESSING FLAG DNR EXPIRING
                  OROORA SEARCH RANGE
                                           1
                  OROOCN SEARCH RANGE
                  OROOAP SEARCH RANGE START
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-30:
                  ORQQAP SEARCH RANGE STOP
     31
     32
                  ORQQVS SEARCH RANGE START
                  ORQQVS SEARCH RANGE STOP
     33
                                                 1
                  ORK PROCESSING FLAG ERROR MESSAGE
                  OR ORDER REVIEW DT
                                          HUGGINS, RICHARD
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-35:
     36
                  OR ORDER REVIEW DT
                                          LISO, EMANUEL
     37
                  ORB PROCESSING FLAG
                                          NEW ORDER
                  ORB ORDERABLE ITEM RESULTS SODIUM
                                                             (SERUM)
                  ORB PROCESSING FLAG
                                         SITE-FLAGGED ORDER
                  ORWDO CSLT 1
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-40:
     41
                  ORB PROCESSING FLAG
                                           MEDICATIONS EXPIRING
                  ORWOR TIMEOUT CHART
     42
                                           1
                  OR ORDER REVIEW DT
                                         DIETCH, ROBERT E
                  ORK PROCESSING FLAG BIOCHEM ABNORMALITY FOR CON ORB PROCESSING FLAG NEW SERVICE CONSULT/REQUEST
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-45:
     46
                  ORWDO LAB
                                 1
                  ORWDO LAB
     47
                  ORLP DEFAULT LIST SOURCE
                  ORB PROCESSING FLAG
                                         UNVERIFIED MEDICATION ORDER
                  ORB ORDERABLE ITEM ORDERED VANCOMYCIN CAP, ORAL
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-50:
                  ORB ORDERABLE ITEM ORDERED
     51
                                                   VANCOMYCIN INJ
     52
                  ORB ORDERABLE ITEM ORDERED
                                                   VANCOMYCIN ORAL SOLN
     53
                  ORB ORDERABLE ITEM ORDERED
                                                  VANCOMYCIN HCL 50MG/
                  ORB ORDERABLE ITEM ORDERED
                                                  VANCOMYCIN INJ *
                  ORCH CONTEXT ORDERS
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-55:
     56
                  ORWDX WRITE ORDERS LIST
CHOOSE 1-56: 56
                         ORWDX WRITE ORDERS LIST
ENTITY: BEARD, DEWAINE L//
PARAMETER: ORWDX WRITE ORDERS LIST//
INSTANCE: 1//
```

VALUE: ORZ ADD MENU TEST// <----at long last!!! here is their menu!
WORD PROCESSING TEXT:
 No existing text
 Edit? NO//
M CODE: ^</pre>

Select PARAMETERS ENTITY:

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